The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1203.—Vol. XXVIII. LONDON, SATURDAY, SEPTEMBER 11, 1858. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

R. JAMES CROFTS, MINING AND SHAREBROKER,
No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every BUSINESS in MINING SHARES, but, not being a DEALER, BUYS and SELLS orders confided to him.
Crofts usual weekly review of mines and the market is, in consequence of press business, postponed until next week.

DIVIDEND.	CHEAP SHARES. NON-DIVIDEND.	SPECULATIVE.
Consols.	Great Wheal Alfred.	Bryntail.
idence.	North Downs.	New Frances.
warne United.	Old Tolgus United.	Wheal Harriett.
awny.	Pendeen.	Lady Bertha.
Day United.	Great Wheal Vor.	South Lady Bertha.
reft.	North Wheal Robert.	Wheal Grenville.
d Consols.	Catherine and Jane.	West Grenville.
tock Consols.	Tolvadden.	Wheal Edward.
of Towy.	United Mines.	Sortridge Consols.
dsfoot.	Wheal Addams.	South Dolcoath.
h Tolgus.	Kelly Bray.	Redmoor.
Basset.		Camborne Vean.
h Basset.		

*** Special business in Old Tolgus United.

R. JAMES LANE, No. 29, THREADNEEDLE STREET,
MINING SHARE DEALER.

MES B. BRENCHLEY, 19, TOKENHOUSE YARD,
LONDON, transacts BUSINESS, as a BUYER or SELLER, in DIVIDEND and RESSIVE MINES, for CASH.
Bankers: London and Westminster, Lothbury.

SPECIAL REPORT (WEEKLY) WILL APPEAR IN
PETER WATSON'S "MINING CIRCULAR," by his own Agents. ABRIDGED TS will also be given, and important information on the present and future ope and prospects of mines throughout Cornwall and Devon, with advice thereon as hase or sale of shares.
e who desire to have copies regularly sent them will be supplied for an annual ption of £1 1s., or 6d. per copy. PETER WATSON.
ish and Foreign Stock, Share, and Mining Offices,
3, Old Broad-street, London, E.C.

PECIAL REPORTS ON

WHEAL BASSET.	KELLY BRAY.
ALSTOCK CONSOLS.	DING DONG.
EBARVAH.	WHEAL HARRIETT.
REAT WHEAL ALFRED.	EAST BASSET.
ORTH ROSKEAR.	PENDEEN.
EDMOOR.	WHEAL GRENVILLE.
ENDRON CONSOLS.	GAWTON.
RAKE WALLS.	WEST ALFRED CONSOLS.
EST TREVELYAN.	PEDN-AN-DREA.
OUTH BASSET.	NORTH DOWNS.
EST FRANCES.	EAST ALFRED CONSOLS.
ROVIDENCE.	NORTH FRANCES.

blished in PETER WATSON'S Weekly Circular and Share List.

R. H. B. RYE DOES NOT ADVERTISE PRICES OF MINING
SHARES, because the practice is highly prejudicial to mining enterprise, and ublic interests. The prices advertised are no guide whatever in investing, and no ce can be placed upon them. In consulting these advertised prices, it will always nd that many eligible investments are WILFULLY depreciated, and many rotten tterly worthless concerns foisted upon the public. Mr. Rye begs, however, to state having a large connection, and practical experience extending over 18 years, he is ed to offer the soundest advice regarding LEGITIMATE investments, and to tran usiness upon terms most advantageous to his clients.
ces, 77, Old Broad-street, E.C.

H A R E S W A N T E D.—

Kitty (Leiant).	Alfred Consols.	Levant.
mbler and St. Aubyn.	Carn Brea.	Rosewarne United.
ilience.	South Carn Brea.	West Seton.
h and Wentworth.	United Mines.	Mary Ann.
borne Vean.	Hingston Down.	Great Wheal Vor.

H. B. RYE, 77, Old Broad-street, Sept. 10, 1858.

R. LELEAN, MINE BROKER AND SHAREDEALER,
4, CUSHION COURT, OLD BROAD STREET,
Commission on all transactions, 1¼ per cent.

CAPITALISTS.—RELIABLE INFORMATION may be obtained on application to the undersigned, in respect of MISCELLANEOUS RITIES generally. BANKS, INSURANCE SHARES, LAND COMPANIES, S (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC S BOUGHT and SOLD at the closest market price, and at moderate commission. ces given and required. JOHN BATTERS, Stock and Sharebroker.
rogmorton-street, London, E.C.

EN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM
upon current value of shares, in CORNISH TIN and COPPER MINES.
Dividends payable two-monthly or quarterly.

R. R. TREDINNICK, MINING ENGINEER, SENDS his
SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES e receipt of a Fee of One Guinea.
w of Cornish and Devon Mining Enterprise, 5s. per copy.
per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and st, South Caradon, and the Devon Great Consols Districts, 2s. 6d. each.
ish Mines, well selected, pay better than any other description of securities, are m risks, and entail less responsibilities than banks and other joint-stock com Shares bought and sold on commission of 2½ per cent.
y advanced at 10 per cent. annually, for short or long periods, upon approved Min res.—4, Austinfriars, Old Broad-street, London, E.C.

ENRY GOULD SHARP, 32, POULTRY, LONDON, E.C.,
Recommends the IMMEDIATE PURCHASE of the following SHARES, at pre arket prices:—

DIVIDEND MINES.		
d Consols.	North Wheal Basset.	Vale of Towy, 17s. 9d.
Brea, £52 5s.	Par Consols, £17¼.	West Basset.
outh.	Providence Mines.	West Wh. Seton, £180.
ubler, £137½.	South Caradon, £407½.	Wheal Basset, £200.
South Tolgus.	South Tolgus, £77½.	Wheal Buller, £200.
e Valley.	So. Wh. Frances, £200.	Wheal Mary Ann.
PROGRESSIVE MINES.		
er Hill.	Lady Eliza (Limited).	South Garras.
on Consols.	North Frances, £6⅝.	Wheal Agar.
Basset, £97½.	Pedn-an-drea.	Wheal Grenville.
Wheal Russell.	Penstruthal, £5¾.	Wheal Harriett, 18s.
Caradon.	Redmoor, 6s. 6d., 7s.	Wheal Ludcott.
h. Alfred, £4¼ ⅜.	South Carn Brea.	Wheal Margery.

—Mr. SHARP has just returned from Devon and Cornwall, and is in a position to rect and good information as to the best and safest mines for present investment.

RES FOR SALE:	45 Sortridge Consols, 23s.	20 Wheal Edward, £4.
, £2¾.	50 Dale (£1 paid), 8s. 6d.	100 West Grenville, 7s. 9d.
nerine & Jane, 4s. 6d.	10 Kelly Bray, £2 1s. 3d.	1 Old Tolgus United, £40.

e and shares of every description bought and sold on commission of 1¼ per cent.

ORGE BUDGE, of 4, ROYAL EXCHANGE BUILDINGS,
LONDON, has SHARES FOR SALE at the following prices:—3 Rosewarne £39; 2 East Basset, £102; 1 South Frances, £219; 5 Wheal Trelawny, £28; aret, £61¼; 2 Unit. Mines, £87½; 1 South Caradon, £415; 1 Grambler, £146; erthing, 5s. 9d.; 50 Pendeen, £3½; 25 North Robert, £3¼; 25 Great Wheal ¼; 20 Hingston Down, £3⅝; 10 North Frances, £7½; 10 Tolvadden, £6¼; t Wheal Busy, £3⅜; 50 Tamar Consols, 17s.; 100 Tehidy, 15s. 6d.; 50 Drake 21s. 6d.; 50 Wheal Harriett; 100 Vale of Towy, 17s. 6d.; 50 Grenville, 34s.; 30 ray, £2⅛; 50 Wheal Arthur, 14s.; 50 Treweatha; 40 Wheal Addams, 17s. 9d.; land; 50 Bon Accord, 19s. 6d.; 100 West Grenville, 8s. 6d.

SSRS. FULLER AND CO., 51, THREADNEEDLE STREET,
LONDON, continue to TRANSACT BUSINESS in BANKING, BRITISH and N MINES, INSURANCE, RAILWAYS, &c. The great impetus given to and the advantages over and above all known securities is apparent to the capi who are quietly availing themselves of the opportunity afforded in securing both d and Progressive Mines; the former paying safely 15 per cent., whilst the latter attain that state, but rise in value from 1 to 500 per cent. The following shares every prospect of success:—

Burra Burra.	Hingston Down.	Wheal Margery.
ead Mines.	Tolvadden.	Wheal Ludcott.
Virgin.	South Lady Bertha.	Tincroft.
Wheal Russell.	United Mines, Tavistock.	West Caradon.

TED, 500 shares South Lady Bertha, at 6s. 6d.
Office Hours from Ten till Four.

G E O R G E M O O R E,
1, CROWN COURT, THREADNEEDLE STREET.
GEORGE MOORE will SELL the following SHARES, or any part, to-day, at quoted prices, FREE OF ANY COMMISSION:—

DIVIDEND.		
25 Drake Walls, 24s.	25 Tamar Consols, 15s.	1 Wheal Basset.
25 Sortridge Consols, £1⅛.	20 Treweatha, 21s.	1 Wheal Buller.
1 South Caradon.	50 Vale of Towy, 16s. 9d.	10 Wh. Edward, £3 18s. 9d.
1 South Frances, £207½.	1 West Caradon, £97⅛.	1 Wh. Mary Ann, £45½.
	1 West Seton.	
NON-DIVIDEND.		
10 Camborne Consols (offer wanted.)	10 Great Alfred, £4⅜.	20 West Grenv., 7s. 10½d.
1 East Basset, £99¾.	20 Lady Bertha, 9s. 6d.	20 Wh. Addams, 16s. 9d.
10 E. Russell, £5 18s. 9d.	10 New Wh. Frances, £7⅝.	20 Wheal Harriett, 18s. 9d.
	10 North Downs.	20 Wheal Zion, 3s. 6d.

GEORGE MOORE is a BUYER of East Russell at 5⅛, and Wheal Arthur at 10s.
PURCHASERS of undoubted respectability can register transfers and receive CERTIFICATES of same previous to PAYMENT.
In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

M R. J. J. R E Y N O L D S,
No. 1, ROYAL EXCHANGE BUILDINGS, LONDON, E.C., ENGLISH AND FOREIGN STOCK, RAILWAY, AND MINING SHAREBROKER, begs to inform his friends and the public that a FAVOURABLE OPPORTUNITY now offers itself to capitalists for INVESTMENT in many undertakings of a substantial character, paying large dividends. There are also others of a progressive character, well deserving attention.
Every information can be obtained at his offices, which his practical experience enables him to give respecting all mines worthy of consideration.

M ESSRS. POWELL AND COOKE,
DEALERS IN MINING SHARES.
8, HERCULES CHAMBERS, OLD BROAD STREET, LONDON.

JAMES HERRON has FOR SALE the following SHARES, at
the prices quoted, and FREE OF COMMISSION:—

15 Bon Accord, 19s. 6d.	10 Kelly Bray, 40s. 6d.	20 Tavy Consols, 6s. 6d.
10 Bryntail.	10 Lewis, £2 2s.	10 Treweatha, 20s. 9d.
10 Boiling Well, 22s.	20 Ludcott, 32s. 6d.	3 Trelawny.
14 Cather. & Jane, 6s. 9d.	20 Lady Bertha, 10s. 9d.	20 Vale of Towy, 17s. 6d.
1 Cefn Brwyno, £36.	20 Nant. & Penr., 21s. 6d.	25 Virtuous Lady, 6s. 9d.
20 Cwm Sebon, 23s.	100 New Crow Hill, 6s. 9d.	30 Wheal Cupid.
2 Clijah & Went., £4¾.	20 North Downs, £2 5s. 9d.	1 Wh. Mary Ann, £45¾.
20 Chancellorsville, 1s. 6d.	5 North Basset, £10¼.	1 Wheal Basset, £200.
10 Drake Walls, 21s. 6d.	5 North Frances.	5 Wheal Margery, £12⅞.
30 Devon and Courtenay.	20 Pem. & E. Cris., 11s. 6d.	10 Wheal Edward, £3⅞.
1 Dev. Great Cons., £475.	3 Par Consols, £17 6s. 9d.	5 West Basset.
5 East Russell, £5¾.	2 Rosewarne United, £37.	50 West Grenville, 8s. 9d.
20 East Rosewarne, 9s. 6d.	10 Sortridge Consols.	10 Wheal Zion, 2s. 9d.
5 East Wh. Rose, £4⅞.	40 South Lady Bertha, 6s.	50 Willow Bank, 3s. 9d.
1 Grambler & St. Aubyn.	15 Swanpool.	10 West Providence.
5 Great Alfred, £4 3s. 9d.	5 South Wheal Hilen.	1 West Caradon, £95.
20 Garreg, 6s. 9d.	1 South Caradon, £407½.	15 Wheal Arthur.
10 Grenville, 32s. 9d.	10 Trebarvah (last call of 20s. paid), 27s. 6d.	5 Wheal Jane, £18¾.
10 Great Hewas, 12s. 6d.		60 West Wheal Jane, 10s.
5 Hingston Down, £3.	20 Tamar Consols, 13s. 6d.	20 Wheal Addams, 17s.
20 Huck. Bridge, 5s. 6d.	9 Tees Side.	20 Wheal Russell, 6s. 6d.
2 Kitty (Leiant).	5 Tincroft, £3 9s. 6d.	2 Wheal Margaret, £58⅞.

Those who make the largest fortunes are those who have nerve enough to take advantage of periods of depression to make their investments, and the present time is one of great depression in the mining market, as many progressive mines, which possess great merit, may be bought at prices which will in a short time satisfy those who are content to receive £600 for every £100 they invest. To those who are desirous of making the trial, Mr. HERRON will be happy to advise with them.
2, Adam's-court, Old Broad-street, London, Sept. 10, 1858.

THOMAS ROACH, MINING AGENT,
37, OLD BROAD STREET, E.C.

MR. JOHN RISLEY, MINE SHARE BROKER,
No. 12, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.
Mr. J. RISLEY is a buyer of Pendeen shares, at the market price.

MESSRS. VIVIAN AND REYNOLDS, MINE AGENTS,
68, OLD BROAD STREET, LONDON, E.C.
Messrs. VIVIAN and REYNOLDS are enabled, through the long experience of Mr. W. C. Vivian as an underground agent and manager of mines in Cornwall, and in various foreign countries, to afford information on most important mining districts; and to inspect and report on mines. They are also enabled, by the several years' acquaintance of Mr. J. J. Reynolds, jun., with the transactions of the London share market, to obtain every advantage for those who may want either to buy or sell mining or any other description of stock.
Messrs VIVIAN and REYNOLDS have daily information from the principal seats of mining, which is at the service of those who may honour them with their confidence.
Messrs. VIVIAN and REYNOLDS have FOR SALE—

1 Wheal Basset, £200.	1 Gramb. & St. Aub, £140.	5 North Crofty, £4⅛.
1 South Frances, £195.	5 Camborne Vean, £2¼.	1 Margaret, £57½.
5 Par Consols, £17½.	10 Harriett, 19s. 6d.	5 North Frances, £6⅛.
1 Alfred Cons., £10 6s. 3d.	2 North Roskear, £21.	1 Providence, £59.
5 Tincroft.	50 So. Condurrow, 3s. 3d.	5 Stray Park, 32s.
5 North Basset.	20 West Grenville, 8s.	1 Buller.
1 Rosewarne, £39.	10 Grenville, 34s.	5 Hender, 27s. 6d.
1 United, £80.	5 Great Alfred, £4 6s. 3d.	1 East Basset, £99.

Messrs. VIVIAN and REYNOLDS are BUYERS of Trevoois and North Dolcoaths.

MINING SHARES FOR SALE.—

50 Sortridge, 22s.	10 East Alfred, 17s. 6d.	24 Wheal Glynn, 10s. 6d.
75 Wheal Addams, 18s. 6d.	10 Tincroft, £3⅜.	1 Rosewarne United, £38.
1 West Seton, £280.	10 South Carn Brea, £4⅛.	10 Great Busy, £2¾.
1 S. Wh. Frances, £202½.	20 Wheal Grenville, 35s.	1 East Basset, £98.
1 United, £81¼.	15 Zion, 7s. 6d.	15 Tolvadden, £6⅜.
20 North Downs, £2.	50 Towy, 18s.	

SHARES WANTED:—Any part of 5 Old Tolgus, at £35; 100 Buller and Basset, £1⅛; 100 Towy, 16s.; 5 Alfred Consols, £10; and 20 Pendeen, £3¼.
Apply to W. MICHELL, 3, Austinfriars, London, E.C.

MR. S. RICHARDS, WOODLAND COTTAGE, STOKE,
DEVONPORT, has FOR SALE the following valuable MINING SHARES, at the prices stated in this advertisement:—

2 So. Wh. Frances, £210.	20 Wheal Sidney, £1⅛.	20 West Grenville, 8s. 6d.
2 Providence, £61.	10 Pendeen, £3½.	30 Lady Bertha, 12s. 6d.
2 East Basset, £105.	20 North Trelawny, 15s.	1 Old Tolgus, £40.
10 East Russell, £5 18s. 6d.	20 Treweatha, 21s. 6d.	25 Wheal Wrey, £2½.
10 Tolvadden, £6¾.	50 Sortridge Cons., 22s. 6d.	50 Raven Rock, 9s. 6d.
10 Calstock Consols, £5⅛.	20 Wheal Harriett, 20s. 6d.	

The above are well worth the attention of investors in mining property at the present prices, it being exceedingly probable that before long they will considerably advance in price.

JOHN GLEDHILL AND CO., MINE AGENTS, SHARE
BROKERS, AND GENERAL DEALERS
MINING RECORD OFFICE, 12, SOUTH PARADE, LEEDS.
Mines well selected are the best investments, paying from 15 to 30 per cent. on the outlay. They have to OFFER SHARES in most of the DIVIDEND and PROGRESSIVE MINES, and are ready to give every information relative to all mining matters.
Dated Sept. 10, 1858.

MR. BRENTON SYMONS, LAND AND MINERAL SURVEYOR,
LITHOGRAPHER, &c., TRURO, will be happy to UNDERTAKE SURVEYS of every description, either at home or abroad. Mr. SYMONS having an office for lithography, can offer advantages to gentlemen who require LITHOGRAPHED PLANS, SECTIONS, &c., of MINERAL PROPERTY; having the whole work under his immediate superintendence, thus saving the time and expense necessary in transmitting the plans from the surveyor to the lithographer.
MINES SUPPLIED with CIRCULARS, CERTIFICATES, BOOKS, TUTWORK and TRIBUTE PAY-SHEETS, SHARE TRANSFERS, &c. Specimens sent free by post on application.

MESSRS. A. J. HUTCHINGS AND CO.'S
PATENT IMPROVED WIRE ROPE.
SOLE MAKERS TO THE
LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS,
And the principal Colliery Proprietors throughout the kingdom.
MANUFACTORY, MILL WALL, POPLAR, LONDON.
ROUND and FLAT ROPES of every description, suitable for mining operations or other purposes, GALVANISED or UNGALVANISED, MANUFACTURED upon the newest and most improved machinery, ensuring greater pliability, durability, and strength; and is admitted by the principal coal proprietors to be far superior to any other kind of wire-rope. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.
GUIDE ROPES, SIGNAL CORD LIGHTNING CONDUCTORS, &c.

MR. T. P. THOMAS, MINING AUCTIONEER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL
MINING SHARE DEALER,
11, DALE STREET, LIVERPOOL.

MR. WILLIAM MOORE, STOCK AND SHAREDEALER
11, HERCULES CHAMBERS, OLD BROAD STREET.
N.B. Business transacted in every description of stock and shares.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING
AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.
N.B. Business transacted in every description of stock and shares.

MR. E. GOMPERS has BUSINESS to TRANSACT in most of the MINES usually in REQUEST in the MINING MARKET.
3, Crown-court, Threadneedle-street.

MR. H. HUXHAM, COLLIERY VIEWER AND MINING
ENGINEER, UNDERTAKES the SURVEYING, VALUING, or AGENCY of MINERAL PROPERTY, the WINNING, WORKING, or VIEWING of COLLIERIES, &c., on moderate terms; and begs to assure those who may favour him with their commands that all business entrusted to his charge shall receive prompt attention, and be executed with the utmost fidelity and care. References and testimonials of the highest character.
Mr. H. HUXHAM has room for TWO ADDITIONAL ARTICLED PUPILS, who would have an excellent opportunity of attaining a thorough knowledge of practical and theoretical mining engineering.—Cwm Rhondda, Pont-y-pridd.

DEVON GREAT ELIZABETH MINE.—ONE HUNDRED
AND FIFTY SHARES (or any part thereof) TO BE SOLD in this valuable mine, at FIFTEEN SHILLINGS PER SHARE.—Apply by letter to Mr. WARREN, Plough-court, Lombard-street.

LEAD MINES.—WANTED, a PARTNER in a proved SILVER-LEAD MINE. The lodes are easily worked, being near surface, and will prove a valuable investment, to pay 20 per cent. on the outlay. About £1000 will be sufficient to carry on the concern with great profit, as the lodes are rich, and the ore has a ready market.—Address, "F. G.," *Mining Journal* office, 26, Fleet-street, E.C.

COPPER AND NICKEL MINES.—The HOLDERS of a METALLIC MINERAL CONCESSION in SWITZERLAND are WILLING to TRANSFER their RIGHTS and PRIVILEGES upon TERMS HIGHLY ADVANTAGEOUS to the PURCHASER. This concession contains several deposits of copper, but is more especially valuable for its numerous rich nickel lodes, which can be traced for a great distance. Parties desirous of acquiring the right to raise the ores for a fixed term of years would also be treated with. Address, for further particulars, prepaid and in French, to Mr. POULET, Ingenieur Civil des Mines, Rue Vinertex Isle 23, à Liege, who is entrusted with the sale of some valuable sulphur (iron pyrites) mines.

WANTED TO PURCHASE, a STEAM-ENGINE of about 15 horse power, suitable for mining purposes, together with pumps, &c.—Apply to the GERALDINE MINING COMPANY (Limited), No. 1, Ingram-court, Fenchurch-street, London, E.C.

WANTED, a PUMPING ENGINE of about 70-in. cylinder, with suitable boilers, in good condition.—Particulars and price to be sent to D. G. GOATLEY, 31, Threadneedle-street, E.C., London.

TO IRONMASTERS.—WANTED, a SITUATION as FORGE
and MILL MANAGER, by an experienced middle aged man, who has a thorough practical knowledge of the business in all its branches. Unexceptional references can be given.—Address, P. 39, *Journal* office, Birmingham.

TO IRONMASTERS AND CAPITALISTS.—WANTED
TO BORROW, SIX THOUSAND POUNDS, upon a FREEHOLD ESTATE, which, with the iron ore, limestone, &c., in the same, is valued at £30,000, to be repaid by annual instalments of £500, with liberal interest. Or an arrangement would be made with a party having the above sum to work the estate jointly with the owner, which would realise from £50,000 to £100,000 in less than 20 years.

TO ALKALI AND SULPHURIC ACID MANUFACTURERS.
—The ADVERTISER has had the sole management of a large manufactory for several years, and is competent to PLAN, ERECT, or MANAGE a similar concern of any magnitude, and on the most improved principles, is OPEN to TREAT with manufacturers having works at present in operation, or capitalists about to erect the same, in any part of England or abroad. Highly respectable reference as to ability and character will be given.—Communications may be addressed to "X. Y.," care of Mr. Jas. Newton Warburton, 30, Cumberland-row, Newcastle-on-Tyne.

WANTED, about SEVEN HUNDRED YARDS of SECOND
HAND IRON RAILS, either bridge or flat, for ordinary mining purposes. Parties having such rails on hand, and desirous to dispose of them, will find a purchaser by applying to ANDREW R. CLARKE, Esq., Goldscope Mines, near Keswick.

ROBERT MUSHET'S CAST-STEEL, in ordinary sizes, suited for all ENGINEERING and MINING PURPOSES, will be 3½d. per lb. in future, as it is quite impossible to meet the present demand at 3d. per lb. Terms, nett cash on receipt of invoice. Messrs. John Climas and Son, of Camborne, are now appointed sole agents for the sale of R. Mushet's steel in Devon and Cornwall.—Apply to ROBT. MUSHET Coleford, near Gloucester.

CHARCOAL PIG-IRON.—THE EAST INDIAN IRON
COMPANY, MAKERS and IMPORTERS of PURE CHARCOAL PIG-IRON, from their works in the Madras Presidency, DESIRE to RECOMMEND it to the ATTENTION of ENGINEERS, STEEL MANUFACTURERS, and RAILWAY TYRE and AXLE MAKERS, as well as for every description of MALLEABLE IRON and FOUNDRY WORK, requiring SUPERIOR STRENGTH and QUALITY.—For price, &c., address the secretary, Mr. E. J. BURGESS, at the company's offices, 8, Austinfriars, London, E.C.

HENRY CORT.—MEZZOTINTO ENGRAVING of the LATE
HENRY CORT, the FATHER of the BRITISH IRON TRADE, and Tubal Cain of our country (see *Times*, July 29, 1856), by an eminent artist, from the ONLY PORTRAIT in EXISTENCE. Published by Mr. RICHARD CORT, at the *Mining Journal* office, 26, Fleet-street, in AID of the SUPPORT of HIMSELF and SISTERS, for INVENTIONS which are now SAVING MORE than the WHOLE REVENUE of the BRITISH NATION ANNUALLY. Artist's proofs, £1; proofs, 5s.; and prints, 1s. 6d. each. Dedicated to the Iron Trade of Great Britain.

WEST END MINE AND QUARRY OFFICES, 5, WATERLOO PLACE, PALL MALL.

MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL
SURVEYORS, undertake the MANAGEMENT and WORKING OF MINES, QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PROPERTIES in their offices with system, economy, and regularity.
Messrs. BRUNTON and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:—
Accounts systematically and closely made up.
Statements in detail, and clear summaries of finance and expenditure.
Entire and impartial openness of books, reports, and documents, to all shareholders, for perusal or extract.
Immediate communication of any important occurrence to the shareholders.
MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY, PLANT, and COSTS OF WORKING FURNISHED.

EAST WHEAL RUSSELL.	WEST PAR CONSOLS.
NORTH WHEAL ROBERT.	WHEAL EDWARD.

MR. MURCHISON'S REVIEW OF BRITISH MINING
FOR THE QUARTER ENDING 30TH JUNE is NOW READY, and contains (besides the usual Particulars of the Principal Mines, Dividends Paid, &c.) FULL REPORTS on the above MINES, just made by Capt. CHAS. THOMAS, of Dolcoath; also, a PLAN of the UNDERGROUND WORKINGS of NORTH WHEAL ROBERT.
GREAT WHEAL ALFRED.
The REVIEW also contains a FULL REPORT on this MINE, by Capt. POPE, of Basset, with a PLAN of the UNDERGROUND WORKINGS.
To be obtained at 117, Bishopsgate-street Within, London. Price 1s.

TOLVADDEN MINE.—A SPECIAL REPORT on this MINE, just made by Capt. PASCOE, of South Wheal Frances, APPEARS in MR. MURCHISON'S REVIEW FOR 30TH JUNE; also, a FULL ACCOUNT of VALE OF TOWY MINE, with a PLAN of the UNDERGROUND WORKINGS.
Now ready, price One Shilling, at 117, Bishopsgate-street Within, London.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORK-
SHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

MOST IMPORTANT TO COLLIERY OWNERS AND COLLIERY MANAGERS.
HENRY J. MORTON AND CO.,
GALVANISED IRONWORKS, 2, BASINGHALL BUILDINGS, LEEDS.
beg to call attention to their
IMPROVED SIGNAL BELLS,
especially prepared to meet the requirements of the new Act for the Inspection of Coal Mines. It has met with the decided approval of many large colliery owners and managers. SIMPLE, EFFICIENT, and CHEAP. Price 15s., 17s. 6d., and 20s. each.
BYRAM'S PATENT ANEMOMETER, for testing the ventilation.
Price £2 10s., £3 3s., and £4 4s. each.
STEAM PRESSURE GUAGES, very strong and accurate, £2 and £2 12s. 6d. each.
For further particulars apply to
H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES, for the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c.
The most ACCURATE MACHINES in use, and the cheapest.
MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.
For prices and all other information, apply to
HENRY J. MORTON AND CO., GALVANISED IRONWORKS,
2, BASINGHALL BUILDINGS, LEEDS.
Patent Asphated Roofing Felts, Boiler Felts, Galvanised Iron, Mining Stores, &c., in Stock.

THEODOLITES, LEVELS, CIRCUMFERENTERS, MATHEMATICAL DRAWING INSTRUMENTS, SCALES, RULES, TAPES, T SQUARES, &c.—JOHN ARCHBUTT, 20, WESTMINSTER BRIDGE ROAD, LAMBETH, near Astley's Theatre, respectfully calls attention to his stock of the above articles, manufactured by superior workmen. The prices will be found considerably lower than ever charged for articles of similar quality. An illustrated price list forwarded free on application: 8 in. dumpy level, complete, six guineas; 10 in. ditto, eight guineas; 14 in. ditto, ten guineas; with compass, one guinea each extra; best 5 in. theodolite, divided on silver, eighteen guineas.

BENSON'S WATCHES.
Excellence of design and perfection of workmanship.—*Morning Chronicle.*
The qualities of his manufacture stand second to none.—*Morning Advertiser.*
All that can be desired in finish, taste, and design.—*Globe.*
The watches here exhibited surpass those of any other English manufacturer.—*Observer.*
Those who cannot personally inspect this extensive and costly stock should send two stamps for *Benson's Illustrated Pamphlet*, containing important information requisite in the purchase of a watch, and from which they can select with the greatest certainty the one adapted to their use. SILVER WATCHES from 2 to 50 guin.; GOLD WATCHES, from £3 15s. to 100 guineas. Every watch warranted, and sent post paid to any part of England, Scotland, Ireland, or Wales, upon receipt of a remittance. Merchants, shippers, and watch clubs supplied. Watches exchanged or repaired. Manufactory, 33 and 34, Ludgate-hill, London, E.C. Established 1749.

MAPPIN'S "SHILLING" RAZORS, warranted good by the maker, shave well for twelve months without grinding.
MAPPIN'S 2s. RAZORS, shave well for three years.
MAPPIN'S 3s. RAZORS (suitable for hard or soft beards), shave well for ten years.
MAPPIN BROTHERS, QUEEN'S CUTLERY WORKS, SHEFFIELD; and No. 67, KING WILLIAM STREET, CITY, LONDON; where the LARGEST STOCK OF CUTLERY in the world is kept.

MAPPIN'S ELECTRO-SILVER PLATE & TABLE CUTLERY.—MAPPIN BROTHERS (Manufacturers by Special Appointment to the Queen) are the only Sheffield makers who supply the consumer in London. Their London Show Rooms, 67 and 68, KING WILLIAM STREET, LONDON BRIDGE, contain by far the LARGEST STOCK OF ELECTRO-SILVER PLATE and TABLE CUTLERY in the world, which is transmitted direct from their manufactory, QUEEN'S CUTLERY WORKS, SHEFFIELD.

	Fiddle Pat.	Double Thread.	King's Pat.	Lily Pat.
12 Table Forks, best quality	£ 1 16 0	£ 2 14 0	£ 3 0 0	£ 3 12 0
12 Table Spoons, best quality	1 16 0	2 14 0	3 0 0	3 12 0
12 Dessert Forks, best quality	1 7 0	2 0 0	2 4 0	2 14 0
12 Dessert Spoons, best quality	1 7 0	2 0 0	2 4 0	2 14 0
12 Tea Spoons, best quality	0 16 0	1 4 0	1 7 0	1 16 0
2 Sauce Ladles, best quality	0 8 0	0 10 0	0 11 0	0 13 0
1 Gravy Spoon, best quality	0 7 0	0 10 6	0 11 0	0 13 0
4 Salt Spoons (gilt bowls), best qu.	0 6 8	0 10 0	0 12 0	0 14 0
1 Mustard Spoon, best quality	0 1 8	0 2 6	0 3 0	0 3 6
1 Pair Sugar Tongs, best quality.	0 3 6	0 5 6	0 6 0	0 7 0
1 Pair Fish Carvers, best quality.	1 0 0	1 10 0	1 14 0	1 18 0
1 Butter Knife, best quality	0 3 0	0 5 0	0 6 0	0 7 0
1 Soup Ladle, best quality	0 12 0	0 16 0	0 17 6	1 0 0
6 Egg Spoons (gilt), best quality.	0 10 0	0 15 0	0 18 0	1 1 0
Complete Service	£10 13 10	£15 16 6	£17 13 6	£21 4 6

Any article can be had separately at the same prices.
One Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dish Covers (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glass), 24s.; Full Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with prices attached, may be had on application.

	Ord. qual.	Medium qual.	Best qual.
Two dozen Full Size Table Knives, Ivory Handles	£2 4 0	£3 6 0	£4 12 0
1½ dozen Full Size Cheese ditto	1 4 0	1 14 6	2 11 0
One Pair Regular Meat Carvers	0 7 6	0 11 0	0 15 6
One Pair Extra Sized ditto	0 8 6	0 12 0	0 16 6
One Pair Poultry Carvers	0 7 6	0 11 0	0 15 6
One Steel for Sharpening	0 3 0	0 4 0	0 6 0
Complete Service	£4 16 0	£6 18 6	£9 16 6

Messrs. MAPPIN'S table knives still maintain their unrivalled superiority; all their blades, being their own Sheffield manufacture, are of the very first quality, with secure ivory handles, which do not come loose in hot water, and the difference in price is occasioned solely by the superior quality and thickness of the ivory handles.
MAPPIN BROTHERS, 67 and 68, King William-street, City, London;
Manufactory, Queen's Cutlery Works, Sheffield.

Now ready, price 2s. 6d. each part.
SOUTH WALES INSTITUTE OF ENGINEERS.—The PROCEEDINGS of this INSTITUTION are PUBLISHED in QUARTERLY PARTS, which contain the Papers read before the Members, unabridged, and accompanied by the necessary explanatory plates, together with full abstracts of the discussion upon them.
Part I contains:—The President's Inaugural Address. On the Manufacture of Tinplates, by Mr. EBENEZER ROGERS. On Blast Furnaces, by Mr. PARRY.
Part II contains:—On the Action of Peaty Water containing Copper, on a Boiler, by Mr. RILEY. On the Effect of Momentum on Pumping Engines, by Mr. MICHELL. On Turret Clocks, by Mr. COPE PEARCE. On the Manufacture of Iron with Charred Coal, by Mr. THOMAS.
London: Published at the *Mining Journal* office, 26, Fleet-street.

Just published, price 8s. 6d., a
NEW GUIDE TO THE IRON TRADE; OR, MILL MANAGERS AND STOCK TAKERS' ASSISTANT.
Comprising a Series of New and Comprehensive Tables, practically arranged, to show at one view the Weight of Iron required to produce Boiler-Plates, Sheet-Iron, and Flat, Square, and Round Bars, as well as Hoop or Strip Iron, of any dimensions.
To which is added, a variety of Tables for the convenience of Merchants.
By JAMES ROSE, Batman's Hill Ironworks, Bradley, near Bilston.
London: *Mining Journal* office, 26, Fleet-street; and sold by all booksellers.

INVESTMENTS IN BRITISH MINES.
Full particulars of the most important Dividend and Progressive Mines will be found in the Fourth Edition of
BRITISH MINES CONSIDERED AS AN INVESTMENT.
Recently published, by J. H. MURCHISON, F.G.S., F.S.S.
Pp. 356; price 3s. 6d., by post, 4s.
Mr. MURCHISON also publishes a QUARTERLY REVIEW OF BRITISH MINING, giving, at the same time, the Position and Prospects of the Mines at the end of each quarter, the Dividends Paid, &c.; price 1s. Reliable information and advice will at any time be given by Mr. MURCHISON, either personally or by letter, at his offices, No. 117, Bishopsgate-street Within, London, where copies of the above publications can be obtained.

OPINIONS OF THE PRESS.
Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal.*
The book will be found extremely valuable.—*Observer.*
A valuable little book.—*Globe.*
A valuable guide to investors.—*Herapath.*
Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald.*
Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle.*
Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times.*
As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph.*
To those who wish to invest capital in British Mines, this work is of the first importance.—*Welshman.*
This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—*Plymouth Journal.*
Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser.*
It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—*Sheffield Free Press.*
Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—*Monmouth Beacon.*
Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle.*
A very valuable book.—*Cornwall Gazette.* [*Glasgow Examiner.*
All who have invested, or intend to invest, in mines should peruse this able work. We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald.*
With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*
Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express.*
Of great value to capitalists.—*Sunderland Times.*
Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner.*
This is really a practical work for the capitalist.—*Stockport Advertiser.*
All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Ipswich Express.*
To capitalists the work will prove very serviceable.—*Birmingham Mercury.*

Original Correspondence.

SMOKE PREVENTION—MR. LEE STEVENS.

Fig. 1.

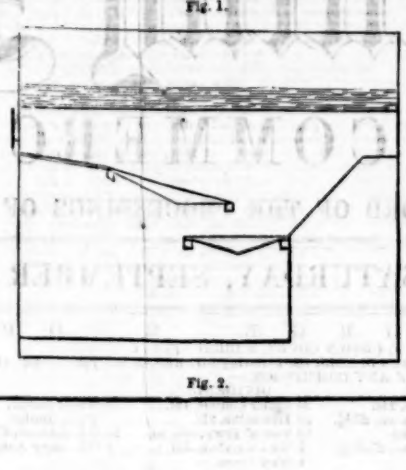
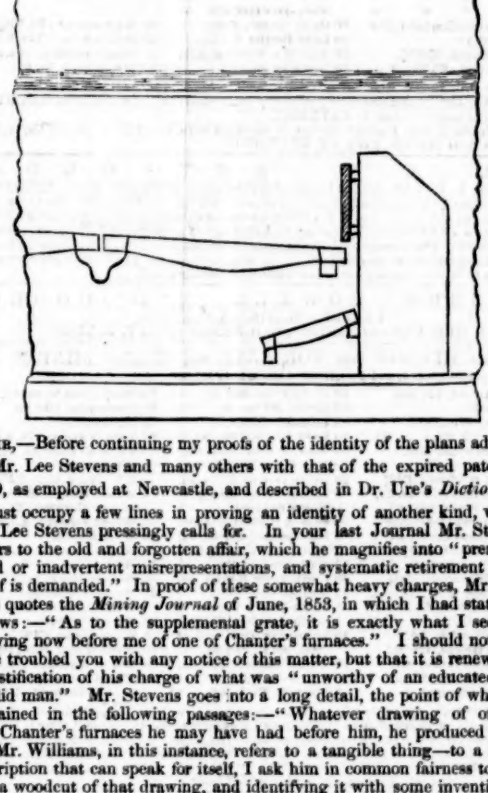


Fig. 2.



SIR,—Before continuing my proofs of the identity of the plans adopted by Mr. Lee Stevens and many others with that of the expired patent of 1839, as employed at Newcastle, and described in Dr. Ure's *Dictionary*, I must occupy a few lines in proving an identity of another kind, which Mr. Lee Stevens pressingly calls for. In your last Journal Mr. Stevens recurs to the old and forgotten affair, which he magnifies into "premeditated or inadvertent misrepresentations, and systematic retirement when proof is demanded." In proof of these somewhat heavy charges, Mr. Stevens quotes the *Mining Journal* of June, 1853, in which I had stated as follows:—"As to the supplemental grate, it is exactly what I see in a drawing now before me of one of Chanter's furnaces." I should not now have troubled you with any notice of this matter, but that it is renewed as a justification of his charge of what was "unworthy of an educated and candid man." Mr. Stevens goes into a long detail, the point of which is contained in the following passages:—"Whatever drawing of one of Mr. Chanter's furnaces he may have had before him, he produced none. As Mr. Williams, in this instance, refers to a tangible thing—to a lineal description that can speak for itself, I ask him in common fairness to give you a woodcut of that drawing, and identifying it with some invention or patent of Mr. Chanter." I will now gratify Mr. Stevens, although any other patentee would rather the patent then in question had been buried in oblivion. Now, the very lineal "woodcut of that drawing" which he now calls for has been before the world for many years. As, however, Mr. Stevens may not have seen it, I will refresh his memory and eyesight with this the most absurd offspring of his invention. If he will refer to page 109 of the third edition of my *Treatise*, or page 108 of the fourth edition, he will find the following verbal and lineal description, and which he now so injudiciously and suicidally calls for:—

"Fig. 65 (see above, Fig. 1): M. Peclet gives this as one of Chanter's patents, which was tried in France and abandoned. Fig. 66 (see above, Fig. 2): This is another of the so-called hot-air plans, although it is nothing but the split bridge with a *supplemental grate*, as adopted by Chanter and others. The patentee professes to have the air *intensely heated* by the handful of scoria, or cinders, which fall on the supplemental grate. This plan, being much pressed on public attention, is here given, than which nothing can be more erroneous in a chemical point of view, or more unwarranted in practical effect." (The description is given in a foot-note.)

The patentee's inflated description begins with the following words, which fully establish the identity with that described by Peclet as Chanter's:—"It will be seen (says the patentee) that this invention consists in the combination of two sets of fire-bars, the first of which is chiefly fed by the scoria and cinders voided from the second, or upper set of fire-bars." I now ask if that description by the patentee himself is not equally applicable to the two furnaces as above given (Figs. 1 and 2), and if identity is not there established?

Now, Mr. Stevens has not given me credit for my desire of avoiding any further jibbeting him, or his name, in connection with this most absurd system, and equally absurd description of it. It will be seen that in neither edition of the *Treatise* have I mentioned Mr. Stevens as the author of this absurd patent and description. I have now, however, no alternative but stating that it is, with its "supplementary fire-bars," its "air intensely heated by the mere scoria and cinders voided from the upper set of bars," its "calorific plate," its "two strata of fire," its "hot-blast without the cost of any pneumatic apparatus," and its "saving of 20 per cent. of fuel;" that all this is the patent invention of Mr. John Lee Stevens, sealed Jan. 8, 1853, No. 121. So much for the charge of "premeditated misrepresentation," or "systematic retirement" from proof.

To return, then, to the question of identity in the plans of Mr. Stevens under his two patents of 1856. Mr. Stevens asks with a triumphant air, "Why did not Mr. Williams include the door (if my notion of intentional concealment be correct) he will, no doubt, inform us." Firstly, his "notion" is not correct; and, secondly, so far from concealment, the perforated door was described in my treatise before Mr. Stevens's two last patents existed, and while he was scattering his circulars descriptive of the supplemental fire-bars, calorific plate, &c." Again, this very perforated door is actually given and described in Dr. Ure's *Dictionary*. With equal propriety might Mr. Stevens ask why I did not include any other part of the furnace, as the dead plate, the bars, the flue, or any other part. The answer is equally simple and applicable: the patent was not for any specific door or dead plate, &c., but for the mode or method of carrying into effect the principle of effecting immediate mixture of the air and the gases in the furnace by *perforated air-distributors*, identically such as Mr. Stevens has used in both his last patents of 1856.

But Mr. Stevens kindly tells us (what every one knows) there cannot be a patent for "*a principle.*" "It may not be deemed superfluous," he adds, "if I say that this patent, the expired one of 1839, from title to termination, contains nothing about *Argand furnace*, or the principles of an Argand furnace—that such a claim would unquestionably invalidate the patent." Is Mr. Stevens, then, so determinately blind as not to see that the specification, in the plainest possible terms (terms which every one but Mr. Stevens appears thoroughly to understand), was not for the *principle*, but the *method* of carrying out the principle—by the use of *perforated air-distributors?* Dr. Ure, who revised the specification, in unmistakable terms, points to this difference. His words are—"*One* of the *methods* in which Mr. Williams has carried out the *principle* of what he justly calls his Argand furnace is," &c. Now, whether the perforated air-distributor be placed at the bridge, or the door, or in the flue, or the crown or sides of a furnace, the following passage from chap. vi. of the Treatise, p. 89, will set this at rest:—"With reference to the place for the admission of air, it is here stated advisedly, and after much experience, that it is a matter of perfect indifference as to effect in what part of the furnace or flue it is introduced, provided this all-important condition be attended to—that the mechanical mixture of the air and the gas be continuously effected before the temperature of the carbon of the gas, *then in the state of flame*, be reduced below that of ignition. This temperature, according to Sir H. Davy, should not be below 800 degs. Fahr.," &c. This at once will enable the public to see their independence of Mr. Stevens, or any other patent furnace projectors.

But the key to this wilful blindless on the part of Mr. Stevens, in not seeing and understanding what every one else does, appears to be this—that he raises in his own mind a false standard or rule as to what the expired patent was, or ought to be, and the means of carrying it out; and then, testing all by this erroneous standard, finds no difficulty in satisfying himself that all is wrong, and that no one but himself has the right of varying, *ad infinitum*, the mere modes, or methods, or apparatus, by which the air-distributor is applied. As the subject of identity is not exhausted, and is really of importance to the public, I will, in your next Number, add a few more proofs.—*Liverpool, Sept. 4.* C. WYE WILLIAMS.

SMOKE PREVENTION—FURNACES, &c.

SIR,—Mr. Charles Wye Williams dexterously begins his letter of last week with an evasion of the very plain questions he has mooted,—being that of *identity of apparatus*,—by attempting to raise a false issue. The matter in dispute refers to *the mechanical means of introducing air into furnaces*, and not to the chemical action of the air in the process of combustion. Yet I anticipated his making some such effort to divert our attention, in my letter of the week before last; when, referring to his (*pretended* Argand furnace) patent of 1839, I observed that—

"It may not be deemed superfluous if I say that this patent, from title to termination, contains nothing about 'Argand furnace,' or 'the *principles* of an Argand furnace;' and if he did claim the exclusive use of *a principle*, no one knows better than Mr. Williams (who has been called to the bar) *that such a claim would unquestionably invalidate the patent.*"

A Northern journalist recently applied, in reference to a similar shift of an opposing writer, the appropriate remark, that "it is an old trick of the hunting-field to draw a herring across the scent." I will not be thus diverted from running down the wily *fox* by inopportune attention to the innocent *fish*. When the *real* sport is finished, however, I will "try back" upon the *counterfeit*, the course of which I can easily recover, marked as it is by the honoured names of the eminent professors, so familiarly used by Mr. Williams.

Putting aside, then, for the present, the new propositions, 1, 2, and 3, introduced by Mr. Williams, and their context, I incidentally take up—

"4. The *use, construction, and application of the perforated air distributors*, by which the atmospheric air is more immediately and intimately blended with the combustible gases in the furnace."

It is upon the meaning of this part of his patent that the whole question hinges. It was quoted by me in my letter of Aug. 18, in due connection with the rest of his description and claims from the specification; but can only be taken as a *portion* and not as the *whole*. Of course this *claim* has special reference to the description; it refers to "*the* perforated air distributors," mentioned by him precedently, thus—

"My invention consists—First, in the peculiar construction of certain parts of the furnace called the bridge, or flame bed, and *the application of certain flattened or circular perforated tubes connected therewith*, by which I effect a quicker and more complete incorporation of the combustible gases issuing from the coal or other fuel in the furnace with the atmospheric air, and by which incorporation a more perfect combustion of the gases is effected, and the formation of smoke prevented.—Secondly, my invention consists in a mode of introducing atmospheric air to the bridges and flame beds of furnaces, and to such tubes, *by means of certain other tubes, pipes, or conduits, in a manner unconnected with, and independently of, the air in the ash-pit.*"

The peculiar means, the precise mechanical apparatus is, therefore, most distinctly described; and to those appliances alone could he have ever had any exclusive right.

Yet Mr. Williams asks *us* to believe what he cannot believe *himself*—that, taking "the above description," as we are bound to do, and the *entire specification*, into account, "we find no reference, or claim, or even allusion, to any particular size or form for the distributor plates;" and that he is, consequently, entitled to construe "certain flattened or circular perforated tubes, and certain "other tubes, pipes, or conduits," of which detailed drawings and references are given (without *a single word* about a door, or an illustration to define it), into an original security of a patent right in a regulating air-door! Under this patent of 1839 he *never could* claim the exclusive use of *any* such door, rectangular or dome-shaped, whether made of fire-brick, iron, or any other material.

Mr. Williams says I have discarded all my other plans of calorific plates, &c. He has too much to answer for himself to make prudent his answering for me; and he is just as wrong in this as in his other assumptions. I am still successfully using those plans, as they best meet peculiar requirements. One of them (that which I offered in 1854 to compete against what I then believed to be his) continues to be in extensive operation; and the first I patented with a view to smoke prevention, &c., retains the preference of many firms. And he next gives *garbled* quotations from the specifications of my two most recent patents. I quoted *his* specification so completely that nothing could be concealed. If he will do the same by mine he will show how much in this, his latest essay at misstatement, he has been again guilty of the *suppressio veri*. Why does he not endeavour to get rid of that habitual artifice; or why does he not *imitate the truth* a little more closely—"assume a virtue if he have it not"—instead of calling me an "imitator-patentee?"

It is evident, that by the crafty introduction, dishonest use, and prominent amplification of collateral or contingent points, Mr. Williams tries to bewilder us. His object is so to confuse the matter, that he may have a chance of wriggling out of the "*identical*" questions, to which I will recall his attention.

Propositions 1 and 2, in my letter of Aug. 18, having been disposed of, by the unavoidable but very discourteously-expressed admission of Mr. Williams, there remain the following:—

"3. The patent obtained by Mr. Williams in 1839 is *not* identical with the description and illustration given by Dr. Ure.
"4. Neither is the method described by Dr. Ure, nor that specified by Mr. Williams in 1839, identical with 'the mode adopted at Newcastle.'
"5. Nor is my invention identical with either of them."

I have no doubt that, before he seriously applies himself to any proofs thereon (where will he find them?)—to any attempt, however futile, so to modify his original attack upon me as to show that it contains the least semblance of truth—or, with more moral dignity, before he admits, for once, that he has made a mistake—Mr. Williams will yet further endeavour to mystify us with incidental matter. If so, and if he really desires to have all examined, *in proper order*, he will find me prepared for the task. For the present, and firstly, we have to get through the three remaining *primary propositions.*

Awaiting the appearance of more letters from Mr. Williams, I turn to Mr. Henry Dircks, of whose ability as a furnace or patent agent I dare say the former has had no occasion to complain; although he may think, with me, that Mr. Dircks has not sufficient skill, or quasi-legal capacity, to play the part of Junior Counsel to such an unapproachable Senior. It is, however, evident, that I must myself, without prejudice or predilection—

"The needful punishment administer
To both the *dexter* and the *sinister*."

1, *Fish-street-hill, Sept.* 8. ——— J. LEE STEVENS.

FURNACE DOORS, &c.

SIR,—I have already given ample reasons, in your columns, why the epistolary veracity of Mr. Henry Direks should be estimated in common with that of Mr. Charles Wye Williams—"like master like man;" and with that observation I offer the following comments on the letter from the former, to which you gave publicity last week:—

I pass over the characteristic conglomeration of Mr. Dircks, in which he assumes the identity of "period" between 1839 and 1841, with the remark that neither my candlesticks nor anything *he* can put in them will shed the dimmest light on the subject. I also pass the question he asks *of* and answers *for* me, and assure him that he "*may* charitably assume that I never saw an Argand furnace until *after* my patent of 1852." He will have to bestow his charity further, when I tell him that up to this moment I have not seen *a solitary specimen* of the so-called Argand furnace. I *have* seen, at your office, the lithograph he mentions (the first copy that ever came under my notice), and, if it were for nothing else than to ascertain how far practice and theory have corresponded in their construction, I shall be glad to be informed, by Mr. Dircks, where within the bills of mortality I can see any of the "thousands" of furnaces at work which were so fitted either by himself or fellow-agents?

As regards that drawing, I take upon myself to say (and *opinion against*

...ation, I suppose mine is as good, in the way of argument, as that of Mr. ...Williams or Mr. Dircks)—*first*, that doors made identically with the figures ...sections it contains would, of themselves alone, be useless in the pre...tion of smoke, or the improvement of combustion; *next*, that if Mr. ...rcks, his co-agents, or Mr. Williams, shall have been paid anything ...the way of patent royalty thereon—*i. e.*, upon such doors—the parties ...paying have just reason for complaint; and, *lastly*, that the elevations ...sections of doors, shown in the said lithograph drawing, are not "*iden*...*tical*" with any of those in Mr. Williams's specification of 1839—with that ...own in Dr. Ure's fig. 38—with a single door to be found in the *Ele*...*mentary Treatise*, &c.—with the door described in the Newcastle report—with my doors! Through *how many doors more* is this controversy ...lead us?

Mr. Dircks, the furnace and patent agent, will not induce me to go ...rough a second examination with him of what I am already engaged ...on with his employer. Declining such inconvenient repetition, I have, ...ertheless, to thank him for the evidence he has given in my favour, ...ether premeditated or unintentional. Not only does he *not* support ...r. Williams in his declaration that his patent of 1839, Dr. Ure's descrip...n of it, and the plan used at Newcastle are *identical* with each other and ...h mine, but he absolutely proves the dissimilarity for which I am con...ding. He blames me for considering my invention to be "something ...gher than a matter to be only secured under the provisions of the Regis...tion of Designs Act," thus allowing that I was entitled to protection ...r the invention to that extent, at all events; and he winds up the argu...nt by adding that "it is in every sense a design, and nothing but a de...n." The interposition, however, of any other writer in the discussion ...tween Mr. Williams and myself is useless for any practical object, and ...unsought for or unfair towards, Sir, yours obediently,

1, Fish-street-hill, Sept. 8. J. LEE STEVENS.

MISMANAGEMENT, AND ITS CONSEQUENCES.

SIR,—You will, doubtless, remember that I have more than once com...ained of the mismanagement of an undertaking with which I am con...cted. The writer has, moreover, entered a written protest more than ...e in the cost-book against the irregularities of the Chairman's proceed...gs, as well as strongly opposed them at the general meetings, though ...th regret (and I think every shareholder must now join in that regret) ...en compels me to say, without any support from his co-shareholders who were present, ...e from one only, on one occasion. The managing chairman has since made himself ...ter. The secretary knew not where to find him; no account could be paid without ...r signature, and the merchants were pressing for the payment of their long-standing ...s. The services of this hitherto *sine qua non* have now been dispensed with, and of ...rse the usual ejaculations are heard—"Who would have thought it; a person, too, ...o has such a large interest in the mine! How he has deceived us!" Let me urge, ...in, the danger of shareholders in mines lulling themselves into an imaginary security ...f confidence in committeemen because they hold a large number of shares, without ...t taking care to ascertain that they have adequate means to pay calls when required ...r the prosecution of the undertaking; otherwise, it must be obvious the larger the ...lding the greater the danger to the interests of their copartners, who it is quite pos...le may be called upon to make up their deficiencies. For it must not be forgotten ...t, in cost-book mines, every shareholder is, individually, responsible for all debts due ...m the mine. If the merchants or others who are creditors choose to select a share...lder and sue him for the whole amount due to them he would, having the means, be ...mpelled to pay. His remedy to recover the sums paid beyond his fair share would be ...n action against his co-shareholders. Hence the necessity so often urged at the meet...gs by the writer of not permitting the mine to get into arrears, but to provide for its ...cessities from meeting to meeting, holding back no liability. It is this keeping back ...d shuffling off to the future that enables so many worthless men to play the part of ...ge holders in mines, in the hope that a trump card will turn up some fine day for them ...fore a call is required, which often comes too soon for their purpose, and they are then ...be found no where. Their shares are forfeited for non-payment of calls, and when ...ld do not realise the amount due upon them. In the present case the calls due are 5*s.* 6*d.* ...r share, and the shares are selling at 1*s.*; and who, I ask, but the deluded shareholders ...st pay the difference?

There have been repeatedly produced at the meetings delusive statements of accounts, ...presenting the assets to exceed the liabilities, whereas the reverse—often amounting to ...considerable sum—requiring a call, was the fact.

It will scarcely be credited that shareholders can repose such blind confidence, after the ...ception has been again and again pointed out to them, and they have been warned of ...e consequences. This much-abused mine has for some time been, *de facto*, under the ...ntrol of one person, unchecked by any rules and regulations, for there are none in ex...tence; unrestrained in his operations by one, and at most two (nominally), committee...en, who do not appear to have met, as is usual, at appointed times to take sweet counsel ...gether; and if they ever did meet at all in committee on the business of the mine no ...ord has been kept for years past of what they did.

Until the last meeting the most important office in a cost-book mine (that of purser) ...d been vacant for many years; so that in point of fact this managing committeeman ...s the "Alpha" and the "Omega"—the supreme ruler and dictator. If any shareholder ...ntured a proposition that would tend to the interests of the shareholders and curb in ...e slightest degree his dispotic sway over them, it was more than once met by his ...eto," reminding the shareholders of the large number of shares held by him: he ...uld refuse to put the motion to the meeting, and coolly retire from it.

It may be asked by distant proprietors, as it was by one present at the last meeting—...w is it printed statements, proved to be most fallacious, can be sent out by the secre...y (reputed to be a most respectable man) to the shareholders, which cannot fail to ...ceive them as to the true position of the mine, and sooner or later prove disastrous to ...eir interests?

The secretary states that he was directed by this managing committeeman, whose ser...nt he is, and that he considers himself bound by duty to send to the shareholders any ...tement of accounts (however incorrect, and avowedly known to be so, for he would ...t put his name to it) as directed. This question opens up the avenue to a most mis...evous, disreputable, and dishonest system of deception, too often, I fear, practised upon ...nding shareholders.

Is the secretary paid wholly by the committeemen for these services?—Certainly not; ...e is paid out of the common fund; every shareholder, therefore, is a contributor to his ...ary, and surely he ought to be regarded as much the servant of the general body of ...areholders as of the committeemen; and if this were not so, he cannot be required to ...d himself to the managing committeeman to deceive and injure them. Now, let us ...quire what the consequence would be if the secretary considered it his duty never, ...her directly or indirectly, to sanction the issue of an incorrect statement of accounts ...m his office. The committee would not, I think, dare to attempt to deceive the share...lders through this medium; and if they did, the secretary, being familiar with the ...counts, would detect, and frustrate, the dishonourable intention. The shareholders ...uld be furnished with a faithful statement, upon which they might, with confidence, ...se their operations, either for sale or increased investment, without being exposed, as ...ey now are, to the artifices of those well read up in the system, who adroitly turn it ...to a source of gain at the cost of the deceived shareholders.

Enough has been said to show the desirability of clearly specifying the duty of a min...g secretary, that it may no longer be made the medium of practising deceit and inflict...g injustice upon those who are contributing to his support, under the impression that ...e is devoting his time and energies to the promotion of their interests.

It has been thought that his appointment to the pursership would remedy the evil. ...e writer trusts it may; and if these crude remarks, suggested by calm reflection upon ...e subjects touched upon, may in your better judgment be at all conducive to warn, ...form, and encourage any of your numerous readers, please insert them in your next ...rnal.—*Sept.* 6. A SHAREHOLDER OF MANY YEARS' STANDING.

IRON MANUFACTURE—QUANTITY v. QUALITY.

SIR,—I am obliged by your publishing my last letter: it was written ...th no other motive than to prove to others how they may obtain quantity ...well as quality, and why this has not been done at some works I could ...me, where it too often happens the poor labouring puddler, who endea...ours to open the eyes of his employer to his own wrongs, and the incom...tency of others, is subject to punishment by dismissal, whether by those ...olding Her Majesty's commission to do justice, or by agents, who may well tremble at ...e voice of truth and honesty. Those who are employed to act honestly and efficiently in ...e managing department should endeavour to make up for their own ignorance and in...perience by at least trying to learn all the desiderata for good puddling, instead of mis...recting, or not understanding, how the materials should be sorted and mixed to enable ...e puddler to do his duty with credit to himself and benefit to his master. But unless ...e furnace managers know how to husband the little carbon they have in the iron, so ...to judiciously mix all pig-iron intended to be puddled, that each portion may have a ...ir share of that most essential ingredient, neither quantity nor quality can be insured. ...In some forges the puddler seldom or ever gets two charges of the same quality to ...erate with, nor can the most experienced puddler at all times detect the quality he ...s to use. If the iron contains no carbon, or but a small portion, it requires a great ...mount of cinder, which alone can render it fluid. The only evil to be got rid of is the sul...ur, which requires a very great heat to smelt it, without which the sulphur remains ...the iron; nor can any other means be used, except a very high temperature is given ...melt out the sulphur, and the consequence is both quantity and quality are lost.

Some iron, containing a fair portion of carbon, requires but little cinder, as the carbon ...ne will be sufficient to make it boil more freely, without which the puddling process ...ver can be perfect. If there be too much cinder thrown into the furnace with iron ...ntaining a fair share of carbon, the result is the destruction of quality and quantity, as the ...er-action of the cinder so buries the iron in the furnace as to render it impossible to ...t rid of the carbon. Iron of this sort for the market is as valueless as uncarbonised ...on. Yet the way in which the managing agents, for want of practical experience, pro...ide for the puddling process at some of the works in South Wales is the very best to be ...opted for destroying both quantity and quality.

One tram of iron contains nothing but uncarbonised iron, the next, in all probability, ...ntains a fair share of carbon. Now, the right man in the right place, who knows how ...carbonise his iron, and make it figure as it ought in the balance-sheet of the company, ...ould take special pains to watch this part of the operation, by taking care to have both ...rts judiciously mixed. Instead of this, the agents allow it to be wheeled in separately, ...nd worked in the same manner, the result of which is the poor discharged puddler, who ...nows how it ought to be, is often put to his wit's end to estimate the quantity of cinder ...e must use to give the iron the required action by boiling it: if too little of uncarbon...ed iron it will not boil at all, and if too much it over boils, which renders it quite useless.

I have often had iron for one or two charges to operate upon, what is called molten ...on, and is well known to contain rather too much carbon to please the puddler or to ...enefit the master. Then, again, two or three charges with but little iron with carbon ...n it; whereas, if a pig of this molten iron were allowed to be part of the charge of the ...ncarbonised iron; but by not allowing me to know the quantity of carbon it contained, ...first thought it must be the cinder that caused the action; but as soon as it melted I ...aw my error, as there was more carbon than I expected. This charge boiled to that ...xtent that the whole was wasted by over action of the cinder, besides destroying the ...uality. Simple as the remedy may appear to be by managers with practical heads on ...heir shoulders, thousands are wasted for the want of iron being judiciously mixed, so ...hat the puddler may always understand the quality of the iron he has to operate with. Besides, this would be the very way to insure regularity in the working of the iron, that the masters may always know how far he can depend on the quality for value in the market. I have seen iron sent to be puddled that could only be with much difficulty melted, if it contained no carbon; and when sent to the mill, in whatever part of the pile it was placed, it had the effect of destroying the bar, by breaking as brittle as glass when rolled, for, however good the pieces that surrounded it, it would, by its reduction in the rolls, force its sulphurous fangs to the surface, so as to render the bar quite useless; whereas, had it been carbonised in the puddling, this loss might have been prevented.

I contend that half of our forge managers are not sufficiently careful of the very life and soul of iron, but must put their employer to the extra expense of Scotch pig, and re-working the iron to give it a fresh surface. Why not carbonise the iron more effectually?

Sometimes the trams are loaded with too much carbon, at others too little. Four trams of pig-iron arrive, but no one ever thinks of mixing this iron; yet, if a few pieces are broken, one will be found to contain enough of carbon, another none, and the rest very little. Why send it into the forge in this indefinite shape, to mislead the operator, and prevent him from making either quantity or quality—at least, without much additional labour, fuel, waste, and wear and tear? Let any practical judge visit some of your iron-works, and he will see scores of tons of uncarbonised mill bars of all sizes and shapes thrown back to be cut up, which might have been, if properly worked, sent to market; and this loss arises entirely, in some places, from want of mixing the iron in the puddling. The demand for quantity causes the most essential elements for quality to be overlooked. At some works the iron is in such an uncarbonised state that it must be operated in some way or other, or they might work till doomsday without producing a single bar marketable. In some works, where ignorance is bliss, and the pocket of the company *nil*, and where rods are made, they consider it cheaper to cut 20 from 40 to 50 rails in every 24 hours rather than improve by carbonising the iron. Now, suppose we cut up 20 rails every 24 hours, let us see the result, which at some works is but a very low average; so that in 100 rails cut up in a work, and as there are five to a ton, this will be equal to 20 tons of rails cut up in a week. But reduce it only to one-half, and the coal required for 10 tons of rail will be 5 cwts. per ton, or 2½ tons for 10 tons of rails; so that there are 2½ tons of coal wasted.

Again, these rails must be made over and over again, until the contract is completed; to say nothing of the wear and tear, the melting of bricks and sand, and depriving the workman of his wages. Some say the Cwm Avon Company have taken a contract at a very low figure for 10,000 tons of rails. How long will it take to make the above? If 200 tons weekly (say), 50 weeks to produce 10,000 tons, the cutting up preparatory process will consume five weeks in the year, or nearly 1000 tons of rails will be cut up; so, at this rate, instead of working 50 weeks to produce the above quality by good management, we must work 55 weeks—or five weeks for nothing in the course of the year.

But the half-witted, mushroom managers are cunning enough to credit themselves for screwing the workmen out of five weeks' labour, by representing it as a gain quite sufficient to cover the expenses of improving the quality of the iron, the necessity for which being occasioned by their own mismanagement, by not mixing the iron judiciously for the puddler. But instead of a gain, the company is actually saddled with the loss of additional wages for five or ten weeks, and otherwise, in the course of the year, through incompetency and want of foresight. Now let us look, again, at the consequence of this incompetency and want of foresight in the present contract for 10,000 tons of rails. Not long ago the cost of making a ton of rails at Cwm Avon was at least 7*l.* per ton; the present market price is quoted at 6*l.* 5*s.* Supposing the real cost at Cwm Avon to be at this time not less than 7*l.* per ton, and bearing in mind the additional cost of five or ten weeks wages, besides waste of coal, melting bricks and sand, as well as wear and tear of furnaces by cutting up one or two thousand tons of rails instead of improving the iron. It is to be hoped the contract price is such that the balance-sheet of company will represent a great gain, instead of a loss of 10*s.* or 20*s.* per ton.

Again, respecting Scotch pig, or any other pig of the same quality, I believe it does more harm than good in many instances, and more especially when allowed to form part of a charge of white pig, which already contains enough of carbon to cause an over action; and this over action is always attended with much waste and labour, as it is requisite to be more puddled. Even with uncarbonised iron it has not the desired effect, for it never freely mixes with the Welsh pig.

For my remarks on the misconstruction of the puddling furnaces at Cwm Avon, showing also why neither quantity nor quality can be depended upon in the present furnaces, especially at this moment, with a contract for 10,000 tons of rails to execute at a price requiring the best of furnaces and the best of management to guard against no trifling loss, I have been not only driven from my bread at these works by agents unable to disprove my statements; but the same agents, in the absence of Mr. Gilbertson, the furnace manager, not satisfied with getting rid of one who had practically gained more knowledge than they ever possessed, have actually been mean enough to use their influence with the manager of the Britton Ferry Works, where I had obtained employment, to discharge me also; not for dishonesty, inability, or want of practical knowledge, but on the dishonest and cowardly plea that they *would not be doing their duty to a neighbour if they allowed me to stop there, after having dared to question the competency of their brother-agents at Cwm Avon.*

Whether Mr. Gilbertson, holding Her Majesty's commission as a magistrate of the hundred of Neath, and appointed to act towards all the Queen's subjects with even-handed justice, will sanction such conduct on the part of his servants I will not presume to determine; but if this can be done by the servants of a magistrate there must indeed be "something rotten in the state of Denmark."

"Old Puddler," too, who tried his feeble hand to black-ball me, I find is one of the Britton Ferry agents, and any one who knows the history of that work is well aware that, owing to the same incompetency and mismanagement which has so severely affected their brother agents and neighbours elsewhere, the affairs of the company have had to be investigated by the Court of Bankruptcy twice within a few years; so that men of my stamp are not wanted there. Hence, their readiness to discharge me, and why "Old Puddler" has been trying his crooked fingers at writing again; but he has burnt them already to the very bone by exposing his incompetency, and had better be quiet, as I know quite as much about him as I do of the Cwm Avon conspirators, and their proceedings to smother the truth, only to save themselves harmless. A PUDDLER.

Sept. 7.

MANUFACTURE OF PIG-IRON.

SIR,—Your correspondent, Mr. David Jones, wanders wonderfully from the subject in hand, and adopts one-sided views: these views he partially adheres to in some of his articles, and in others he dissents from them altogether. The point at issue is one not accompanied with any amount of impossibility, and can be easily solved, if Mr. Jones would pen down the quantities used in the furnace, blast-engine, stoves, and calcining kilns. Mr. Jones strongly coincides with the great amount of economy exercised in the Welsh district, but does not dissect the matter, to show how and why such economy is arrived at. In the first part of Mr. Jones's article he introduces the ignition of the furnace gases in the stoves as the cause of using the 2 or 3 lbs. of coals to the ton of pig-iron, and, accidentally or wilfully, loses sight of the quantity of coals used for the blast-engine, boilers, and calcining kilns, without showing, in a plain and straightforward manner, wherein such savings are achieved. And as to Mr. Jones recommending me to visit Wales, it is quite unnecessary, as I have been in Wales, and resided in Merthyr Tydvil, the principal seat of the iron manufacture, for some time, and there became acquainted with the materials for the present discussion, and believe myself to be as well informed on the present manufacture of South Wales as those who live at Newport, and not so ignorant on the subject as Mr. Jones would presume.

Mr. Jones may well allude to the suitableness of Durham coke in the smelting furnance; this coke has been tested in an able manner by the South Staffordshire ironmasters, and has been found to be a great assistant in furnishing them with a good carbonised pig, so essential for the production of their superior quality of merchant iron, for which they have obtained a world-wide reputation. At the same time, cokes were forwarded from the South Wales district to Staffordshire at 3*s.* or 4*s.* per ton less, and the same desire was evinced as the present controversy between the North Country coalmasters and the South Wales coalmasters for the pre-eminence in the coke trade, but it was of no avail, as the amount of sulphur they contain debarred their being successfully used. Mr. Jones agrees with me in saying that iron of a good nature, possessing softness, toughness, and fibrousness, is suitable for certain light forgings, but differs from me in saying that such iron should be almost entirely free from carbon and the metalloids, because it is a thing almost of impossibility to obtain an iron free from these alloying bodies; such an iron would not melt, nor could it be wrought under the hammer. Iron or steel perfectly free from any admixture of cinder or oxide, or other extraneous matter, in other words, absolutely pure iron, is not the article those engaged in the manufacture should seek to produce. The best bar-iron frequently contains a proportion of carbon up to 0·20 per cent., and a small amount of impurities. Steel ceases to be hard and strong if it is deprived of the small amount of silicon it contains, or if by repeated heating that silicon becomes oxides; the same applies to bar-iron, deprive it of all foreign admixture, it ceases to be strong, tenacious, beautiful iron, and becomes a pale soft metal, of feeble strength and of doubtful utility. Again I state, that if there is not sufficient carbon in the pig-iron to keep up the fermentation in the boiling furnace until the sulphur is completely removed as bicarburet of sulphur, and any extra amount of the metalloids, a bad and worthless iron is sure to be the result. Mr. Jones says he will not alloy the iron with carbon to give it nature, and a portion of the metalloids to give it body, and, consequently, cannot produce an iron of the above description, possessing softness, toughness, and fibrousness.

What, then, is the cause of the imputed superiority of the cold-blast iron over the hot-blast iron? Is it not in the amount of carbon and the metalloids it contains? As a proof of the fact, I give the following analyses by Dr. Thompson of cold and hot-blast irons:—Cold-blast iron, 91·22; alloys, 8·78: hot-blast iron, 95·584; alloys, 4·478. Here we have a difference of nearly 4 per cent. in the quantity of alloying substance in cold-blast iron than in hot-blast iron, so that we have a sufficient reason for coming to the conclusion that it is the want of a sufficient amount of alloying substance or stiffening matter in the hot-blast iron which is the cause of its weakness. It is in the blast-furnace, and not afterwards, that the character of the iron is determined.

I believe Mr. Jones thinks it a very awkward and unsystematic way of extracting wrought-iron from its ores, in first of all endeavouring to combine the iron with carbon and a certain amount of the metalloids in the blast-furnace, and in the other stages of its manufacture. The only aim appears to be the partial separation of these alloying bodies that it was so desirous it should be united with in the blast-furnace, and then the getting rid of it may seem a ridiculous way of proceeding in the manufacture of wrought-iron to parties not acquainted with the affinities which it is needful to put in action in the iron smelting furnace. Metalloids in iron act the same as the sap in the trees of the forest, by causing a coherence of the fibre, such as iron in a connected form, and cinder in separate cells are thus blended together in one homogeneous mass. The more such iron is stretched, either by the hammer or the rolls, the more fibrous it will become, and other circumstances being equal, the strength will be proportional to the fineness of the fibre.

Mr. Jones says my views are visionary with regard to the 4 per cent. of sulphur, in which case I would remind Mr. Jones that the point in dispute is that 22¾ cwts. of coal produced a ton of pig-iron, including blast-engine, hot-blast stoves, calcining kilns, in which case Mr. Jones says it is impossible to produce a ton of iron with 22¾ cwts. of coal; but to prove that 4 per cent. of sulphur does not exist in the ton of common Welsh cinder pig, Mr. Jones, in making up his calculations, takes the percentage of sulphur in cinder pig, Mr. Jones, in making up his calculations, takes the percentage of sulphur in the cinder so that by trying 24 cwts. of coal as the amount of coal required to produce a ton of pigs, so that by trying 24 cwts. to take his friend out of the trap he has got into it himself; and I again state that 24 cwts. of coal cannot produce a ton of good pigs, if it were all to be put into the blast-furnace. If Mr. Jones would make out a regular yield account it would suffice.

Further on, Mr. Jones states, from Gmelin's *Chemistry*, the quantity of carbon and alloys in foundry and forge iron, in which case Mr. Jones quotes the carbon in foundry iron to be 2·87; silicium, 1·84; in forge iron, mottled and white, 2·97; silicium, 0·45. Now, from this statement it would appear that there is more carbon in the mottled and white iron than there is in the foundry iron; but such a deceptive statement is only taken for what it is worth. No man that has the least idea of the charging of a blast-furnace could look upon it as a faithful analysis of the carbon in iron. It is well known to every furnace manager, that when he charges for grey, or foundry iron, he uses an increased burthen of cokes to the ore and limestone charged. In the case of making forge-iron, he diminishes the amount of fuel, and, on an average, it will take about a quarter more fuel in making foundry than forge, and, consequently a more highly carbonised iron. It is a well-known fact, that the more rapidly iron is produced the more its quality is deteriorated; this fact applies to the manufacture of white pig.

Dud Dudley's description of the irons he made would suit here. He says he made three qualities: the first sort is grey iron; the second sort is called motley, of which one part of the sows or pigs is grey, the other part is white, intermixed; the third sort is called white iron; this is almost as white as bell-metal, but in the furnace is least fined and the most terrestrial. Although Dud Dudley did not swallow a couple of volumes on chemistry, and lived in the dark ages of the 17th century, he gives a better description of the qualities of the irons than Mr. Jones does, who lives in the enlightened age of the 19th century. The carbon in pig-iron is, as stated by Mr. S. B. Rogers, a gentleman of high standing as an iron metallurgist—Foundry iron, hot-blast, 5·4 per cent.; hard white hot-blast iron, 1·8 per cent.; this is the highest and lowest percentage in 20 samples of iron, but the average of the 20 samples is 3¼ per cent. Practical men ought not to make such errors, but while the blind lead the blind both are likely to fall into the ditch. The remainder of Mr. Jones's epistle I will refer to in the next Journal.

Middlesbro', Sept. 9. WALTER BARR.

PACHUCA AND REAL DEL MONTE MINING COMPANY.

SIR,—Allow me to assure you that the warning against this company, with which your correspondent, "Vox Anglica in Mexico," favours capitalists in your Journal of Sept. 4, is quite unnecessary, as I am authorised to state that there is not the slightest intention of putting the concern into the London mining market; and that it is in far too prosperous and profitable a state to create in the bulk of its present proprietors any desire to part with such valuable property.

During the last five years, ending Dec. 31, 1857, the mines have produced 1,351,501 marcs of silver, the value of which was $11,823,803; and, after paying the owners' share of profits, and providing for greatly extended new works, the shareholders have been paid dividends amounting to $2,684,416. This will be seen by the following statement of results for each year:—

	Produce of silver in marcs.	Value of silver in dollars.	Dividends paid to shareholders in dollars.
1853	175,939	1,537,796	276,700
1854	207,126	1,811,822	307,500
1855	271,747	2,355,503	484,312
1856	350,550	3,081,663	861,000
1857	346,139	3,039,019	754,904
Total	1,351,501	11,823,803	2,684,416

During the first few months of the present year all the profits were absorbed in the purchase (from the heiress of the last Conde de Regla) of the very silver reduction works which your correspondent supposes the company to run such risk of losing; but the usual monthly dividends are now resumed, with every promise of their steady continuance for many years. The 47th dividend, amounting to $51,250, was declared payable in the City of Mexico on July 15 last; and the 48th dividend, of a like amount, would be payable on or about Aug. 15 last.

That the present company in Mexico originated in the purchase of the property and privileges of the Old Real del Monte Company is a fact; but its mining operations have embraced many setts not before worked, and have since been prosecuted on a far more extensive scale. It is no less a fact that its great success has not been obtained, even in part, from the mines of the Conde de Regla, which formed the nucleus of the old company's operations, and for the return of which some of the branches of that family have set up the unjust and untenable claim stated by your correspondent. The Regla family were perfectly cognisant of, and concurrent in, the change of companies; and very thankfully continued to receive from the new one their annual pension of $17,000 for seven years, until the prosperity of the company's other mines (which they confused with their own) excited their avarice to this attempt. When I state that the disputed mines of the Regla family caused the old company a loss of $4,000,000, and that they have since barely paid the current cost of working them, it will be seen that even the very remote possibility of their loss would in no serious degree injure the interests of the present company. The other claim alluded to by your correspondent, as having been set up by "a countrymen of ours," Mr. William Chynoweth, was only one of those vexatious and unprincipled attempts to appropriate the property of others to which the peculiar tenure of mining property in Mexico is liable. The extensive and rich mine of Rosario, which has been entirely developed by the present company, and which is now steadily producing the large amount of nearly $2,000,000 worth of silver per annum, is generally acknowledged to be one of the most systematized and securely worked mines in the republic of Mexico; but even with the utmost care and precaution, as all practical miners well know, accidents will now and then occur in the continued operations for extending the workings of such a mine. An event of this nature took place at the commencement of this year in the Rosario Mine, when the fall of a large portion of rock temporarily blocked up one of the shafts, and impeded the extraction of ore from that part of the mine for one month; but, mark! without causing the loss of a single life. Presuming on this accident, Mr. Wm. Chynoweth, an Englishman, formerly employed at Real del Monte, but now living apart in the neighbourhood, tried to prove that the mine was improperly worked, and set up before the Mining Tribunal of the district the preposterous claim that the mine should, consequently, be taken from the company, and transferred to him. The Tribunal, after due enquiry, and paying the highest compliment to the company for the very superior working of the mine, entirely refused to admit the claim of Chynoweth, who then successively appealed to the Chief Mining Tribunal of Mexico, and the British Minister in Mexico, with the same result; so that this question is also quite set at rest; for it cannot for one moment be supposed that the British Government, if appealed to, as stated by "Vox Anglica in Mexico," will act contrary to the opinion of its respected representative, by countenancing the wicked attempt of "our countryman."

The position of the Pachuca and Real del Monte Company is, in fact, at this moment most secure and prosperous; and this is borne out by the fact that, in the midst of the present civil war which distracts the republic of Mexico, this concern has commanded such *prestige* with all parties as to continue its mining operations with undiminished energy and success. Although, as I have already stated, there is not the slightest intention of bringing this company into the mining market of London, yet your correspondent is correct in stating that the shares, which originally were only 205 in number, have, for the convenience of transfer, been subdivided into 4100 (not 6150). Some of these occasionally change hands, and by the last packet from Mexico I received an authority from one of the shareholders to dispose of a number of shares, not exceeding 100. Some inkling of this authorisation may have got wind, and been magnified into an attempt to place the concern in the London market; but here you have, as I believe, the whole truth. JOHN PHILLIPS,

Agent to the Pachuca and Real del Monte Mining Company.

5, Queen-street-place, Sept. 8.

TYN-Y-WERGLODD SLATE QUARRY COMPANY.

SIR,—At the last general meeting of this company great dissatisfaction prevailed amongst the shareholders regarding the competency of their manager. It would appear, by most of his reports for the last six years, that the company possessed a most valuable property, the material being almost inexhaustible, requiring only a little further outlay to enable him speedily to produce the most satisfactory results. A continuation of statements like these, without any corresponding return to warrant them, could not be listened to any longer by the shareholders; consequently, Captain Strode and other new directors were at once elected, with the view of ascertaining whether a more economical system of working their quarry could not be found, and also to investigate generally the affairs of the company.

I hear the first step taken by way of reform has been the manager's dismissal, and the suspension of the works. I see, too, that they are advertising for contractors to work their quarry, and deliver their slates on to the wharf at Carnarvon, at a fixed price. This looks to me a little more like business. By adopting this plan they will be able to ascertain at once whether they can have slates made at a price that will leave a profit or otherwise. It will also settle the question of making further calls, which the shareholders are now tired of paying. Had this course been adopted six or seven years ago, some 8000*l.* or 9000*l.* might have been saved.

The most surprising thing is that this quarry produces some of the finest green slates in the kingdom: the new Museum at Oxford is now being covered with them. The way in which they are being laid on the roof, alternately with blue, gives the building a very pretty appearance, and is well deserving the attention of architects and builders. The shareholders, knowing they possess such a valuable vein of green slates, naturally conclude that, if properly worked, they ought to produce slates at a cost that would leave a profit when sold at the rate of 60*s.* or 70*s.* per ton. Whether this can be accomplished or not remains to be proved. The present directors, I have no doubt, will exert themselves to the utmost, and not leave a stone unturned.

However, there cannot be the least question that this quarry can be made to prove a very remunerative concern; but a reduction in the establishment as at present constituted is a matter, I would suggest, for the consideration of the directors. I say, let all put their shoulders to the wheel; this is the only way of getting out of a difficulty, and preventing the total loss of a very large paid-up capital. A SHAREHOLDER.

Sept. 9.

GREAT SHEBA MINE,—AND L-A-W.

SIR,—In the two Chancery suits commenced by the Rev. Dr. Pemberton, Major Yorke Martin, and John Beddoe, against Vatcher, the Mayor of Exeter, Lang, and Sergeant, there are five attornies already engaged—Hobler, Stogdon, Younghusband, Hooper, and Fox. There are also four counsel engaged—Baily, Salmon, Roxborough, and Smale. Two more leading counsel must be engaged before the suits come on for hearing, one by the plaintiffs, and another by the defendants, Hooper, Lang, and Sergeant. This will make in the whole eleven lawyers. The bills and interrogatories are unusually long, and are full of legal jargon. The answers cover seventeen skins of parchment; and plaintiffs and defendants pray the Court to muict each other in costs. The whole of the proceedings are of the most frivolous character; and in order that the mining community and the public may be enabled to form a correct judgment of suits commenced in bad temper, and without much discretion, a pamphlet entitled "The Double Chancery Suit," in two parts, is about to be published by one of the defendants. The first part will contain the Bills, Interrogatories, and Answers, with all the correspondence and the explanations.

The hearings will come on before Vice-Chancellor Kindersley, in November, and are likely to occupy the Court many weeks. The lawyers are quite secure, having the directors and shareholders, as also a little estate, to fall back upon; they are, therefore, working hard, and no one can blame them.—*Sept.* 7. OBSERVER.

GREAT WHEAL VOR, AND ITS MANAGEMENT.

SIR,—In your Journal of Aug. 21 our managing director (Mr. Noakes) writes—"The mine is now drained to the bottom. The stopes are dry, and we have discovered an excellent course of tin, which, from the forward state of the skip-road, will soon become available. Trueman's lode is very kindly, and a winze at Wheal Metal, below the 110, is at present worth 300*l.* per fm." Capt. Gill, two days after, writes his report, and says nothing of the value of Metal lode, merely stating that "our prospects at Wheal Metal are looking very well," and hopes to give a more detailed report in the following week.

The fact is, Capt. Gill knew very well that the lode was not worth a quarter of the value attributed to it by Mr. Noakes, and Mr. Noakes himself could not have been ignorant that the lode was in a failing state when he wrote his report, as he took the necessary steps to ascertain its value, by sending his agent down to inspect it previously to his posting it. Since the above was written, however, no detailed report, as promised, has appeared. Why is this? How is it that we cannot get a correct and regular report of our proceedings and prospects at the mine? Why are the breakages and the falling off in the value of the ends and winzes not reported regularly and truly? How long are we to be tampered with by our servants in this manner? The shareholders here, in common with myself, know what is transpiring, but not from our agents. Is it not a hard case that, after paying so many thousands, we should still remain the subject of gross deception? I find that at Wheal Metal they are sinking a winze at the cost of 15*l.* per fm. in the bottom level as low as the shaft, and drawing the water with barrels. Is this practical, sound, legitimate mining? Let any competent person decide; every miner knows better. I am afraid that there is too much truth in the letters of "Looker-on" and others, which have recently appeared in your columns, and I think it wise to take the advice tendered, that the company bestir themselves at the next meeting, and put the right men in the right places. It was recently stated that Capt. Gill has saved the company 1900*l.* per month; I hope the next three months will prove it. The share-

holders will ere long become wide awake to the fallacy, and better understand what is meant by his *saving* so large an amount. And why are the men lectured and cautioned by the authorities on the mine—not excepting the managing director himself—not to speak of anything they see in the mine, and not to make it known that the 300*l.* per fm. wins is become worthless? Efforts may be made to gag the men, but they will be fruitless; in defiance of all, truth and facts will come abroad. The men can see them as plainly as their agents. I would now call on all our shareholders to arouse from their lethargy, and demand at least a regular and correct statement of our proceedings and prospects.—*Sept.* 7. A SHAREHOLDER.

GREAT WHEAL VOR, AND ITS MANAGEMENT.

SIR,—I have only a few remarks, with your permission, to make upon Mr. Crease's last letter, and the position in which he has placed himself in this affair. He evades the main question, and ignores the facts—so deeply inculpatory to himself—that the breakages of the rods were not in the joints only, and were caused by the excessive strain thrown upon them by the deficient and misplaced balance; and again talks of an alteration of the joints, as if that would reduce the weight or increase their strength. If his new jointed, or any other iron rods, were substituted, they must have the same sectional area and weight. This would involve the removal and re-arrangement of the balance to the place, and in the way originally agreed upon, but never carried out, or future breakages would be certain.

Has he calculated this expense? With wood rods this would be obviated. The expenses of the wood rods will appear in due course in the proper place; until then Mr. Crease must wait for the information.

I have now only to say, in conclusion, that I should be glad to see him more worthily engaged than in attempting, upon erroneous asumptions, to traduce the character of his former colleagues, and shirking his own responsibility in the matter by casting imputations upon those who have succeeded him in the management. If, however, it gratifies him, it can hurt no one, and we leave him to his indulgence. MATTHEW LOAM,

7, Terrace, Liskeard, Sept. 8. For Hocking and Loam, Engineers.

GREAT WHEAL VOR UNITED MINES.

SIR,—I have read all the letters (including Mr. Matthew Loam, jun.'s) respecting this mine in your Journal. Thoroughly knowing this mine, I beg most respectfully to lay the following particulars before the readers of your valuable paper:—

The rods, as Mr. Loam, jun., has proved, have borne an immense burden; this only demonstrates what I have already publicly reported to the committee and shareholders.

I have only to refer them to the last breakage, and if Mr. Matthew Loam, jun., would only enquire, he will find a party who can inform him that two rods out of six had a thick incrustment of rust on the bearings, consequently one-third of the power is lost—can wood beat that? This only proves what I before stated, "that they do not bear an even strain:" in short, the connections are faulty, and the rods broke at the connections. From personal observation, I am quite satisfied there has been gross mismanagement somewhere or other.

I sincely hope the adventurers will study their own interests by appointing to the management parties who will attend more to their welfare.

In conclusion, who is going to pay for the proposed alterations?

Sept. 9. EDWARD S. CREASE.

GREAT WHEAL VOR.

SIR,—There has of late been much correspondence about the management, or, according to others, mismanagement of this mine, and again respecting the efficiency of the present directors. Correct figures are facts, and facts are stubborn things. In a statement of accounts sent me, I find that for the first six months the present directors were in office—*i. e.*, to the end of June last—a saving of about 1900*l.* per month, or at the rate of over 22,000*l.* per annum, has been effected. Surely this augurs well, and seems to indicate that our interests are now in better keeping than heretofore. With this fact before us, we may safely leave the discussion of iron and wooden rods to the engineers. The only objection to the present board of directors is that it includes a member of the old board, and a clerk of the large contractors and suppliers of materials. If two eligible shareholders can be found (and I trust they will be forthcoming at the meeting on Wednesday next) to supplant the two objectionable members, the entire board will be deserving the confidence of the shareholders, and Great Wheal Vor will, for the first time, stand a chance of taking a respectable position before the commercial world.

London, Sept. 10. A SHAREHOLDER OF 1853.

DEVONSHIRE GREAT CONSOLIDATED COPPER MINING CO.

SIR,—Mr. Morris having drawn my attention to the *Mining Journal* of Saturday last, relative to the remarks on these mines, I think it ought to be corrected; and I beg to say, for your guidance, that the mines, on the whole, are looking far better than they were 12 or 18 months since, the best proof of which is that the reserves are not the least diminished, but, on the contrary, increased since the last annual meeting. With regard to the bottom of the mines, we have had nothing so promising for years, downwards, as the lode in and about Agnes' shaft, and the course of ore in the deep levels at Wheal Emma, although poor just for the present, will speak for itself. JAMES RICHARDS.

Tavistock, Sept. 8.

[We readily give insertion to the above letter, and much regret that, in the absence of our regular City correspondent, the remarks complained of should have found insertion.]

MENDIP HILLS MINING COMPANY.

SIR,—My attention has been called to a letter in your Journal of Aug. 28, purporting to come from a shareholder in the Mendip Hills Mining Company, and bearing the signature "A. Ennor." I beg to inform you that there is no such name on the register of shareholders, and that the opinions and surmises so gratuitously offered by the writer are as unfounded as the fictitious assumption of brotherhood, which seems to be put forth for the purpose of giving colour to a malicious attack upon the management.

The motive for this attack may possibly be found in the fact that a person bearing the same name, and, I believe, the father of the writer, was formerly employed by the Mendip Company, who advised me to place the entire management of the mines and dressing department under his care. The directors did not think proper to adopt this advice, and his services were declined, as was also his offer to become a holder of five shares; and I may add that the directors have had no reason to regret the decisions arrived at on both these points, but, on the contrary, incline to the opinion that their interests are not likely to be promoted by association with persons so reckless in their attacks upon others.

EDW. H. BARWELL, Chairman of the Mendip Hills Mining Company.

Mendip Hills Mines, Somerset.

ACCIDENTS IN MINES.

SIR,—Accidents in the metalliferous mines of Devon and Cornwall have been so numerous of late as to excite surprise and sympathy. Scarcely a paper is issued but we see some poor fellow has been smashed or killed. Surely, they who follow so dangerous a profession should have all the protection it is possible to give. I acknowledge it is impossible to guard against many of the dangers to which miners are liable. I know, too, that more than one-half of them may be avoided. The man who was killed at Boiling Well, a few days since, was a sailor it appears, and not a miner, and that this was his first sad essay. Why was so inexperienced a person permitted to go down to work in such a place at all? I have been underground some thousands of times, and in various mines, and have many times called the attention of captains to the insecure and dangerous position of the works. Loose, broken ladders; staves broken for many feet at a time. No guard rails in the sollars where the engine-rod is at work; frequently no sollar at all, but a mere bit of wood placed across the shaft for a man to change ladders, or go into levels. Yawning winzes crossed by a mere plank. Deep bottoms walked over for 10 or 12 fms. long on a mere bit of slab, or anything that comes to hand; should they break, loss of life or limb is certain. Insecure timbering the ground is the most frequent cause of disaster. Since the introduction of the safety-fuse accidents from explosions have decreased. A Government Inspector for mines should be appointed, whose duty it should be to visit mines frequently, examine the state of the works, and report thereon; fining such as are defective should be done at a quarter sessions, or some other court, by a jury, if necessary, or by a magistrate; the Inspector, too, should have notice forwarded to him, under a heavy penalty, of all mine accidents occurring within his province, when it should be his duty to attend the inquests, and cause a searching enquiry to be instituted, and, when culpable neglect can be proved, to report the same at the sessions, or other court, with a view to compensate the relatives, by fining the delinquent. Were these measures adopted, many valuable lives now annually sacrificed would be saved, and your readers would be spared the harrowing accounts so frequently perused.

There are inspectors of coal mines, factories, and emigrant shipping; indeed, everywhere where gross evils have been proved. Then, why not for metallic mines, where bad ventilation, insecure works, neglected shafts, and a host of other faults are to be found, to say nothing of the employment of children?

I purpose, if possible, to get a list of the recorded casualties and their causes for the last five years, and then call the attention of the humane to the subject, and see if their sympathy will not cause some steps to be taken for the protection of life and limb. The letters which have appeared respecting neglected shafts have done much good, as I see the stewards of several lords are erecting stone hedges round them to protect the public.

Sept. 7. GEOS.

AUSTRALIA—SUEZ OR PANAMA.

SIR,—Your article in last week's Journal leads me to the conclusion that the writer was not quite up to the mark on the subject on which he ventured to write. I pass by the *taste* displayed in the observations as to the character and standing of the members of the deputation to the Colonial Minister (which could only arise from the writer's want of knowledge as to who and what they were); the *assumption* that our ministers only gather their knowledge on subjects from the statements made by members of a deputation; and the conclusion so modestly come to, that the Colonial Minister has committed an error in expressing an opinion in favour of the Panama route; my object simply being to show that the article in question must have been written under a total misapprehension of what the Colonial Minister intended to, and did, convey to all; for, instead of expressing an opinion in favour of the Panama route to the prejudice of the Suez, as your article would infer, Sir Edward, as became a statesman, looked neither to the interests of parties advocating the one or the other route, but said—"There are two highways between England and her Australian colonies, both will tend to develope resources advantageous to all. I look not to the particular interest of one or the other, and in adopting both routes I open two channels of communication instead of one." This is, I believe, what the Colonial Secretary in effect meant and said, and there is no doubt every unprejudiced mind will at once see his wisdom and foresight.

The advocates for the Suez route say—"Look at the difference in distance between the Suez and Panama routes." That may be, but the Suez route has been tried, and has not been successful; and there is an old saying, that "the longest way round is the nearest way home:" this may prove true when the Suez and Panama routes shall both become the means of communication between England and her Australian colonies. I do not advocate either the Suez or Panama route, but *both*; and every one at all acquainted with the subject, and not prejudiced or interested, will adopt the views shadowed forth by our Colonial Secretary, and which I have no hesitation in saying will ere long be carried out. A COLONIST.

STOPPAGE OF A TRAIN, AND SEIZURE OF RAILWAY CARRIAGES FOR WORKMEN'S WAGES.—We learn from Australia, that as a train on the Geelong and Melbourne Railway was about leaving Williamstown, and only waiting for the mail bags, a seizure was made by the authority of the Williamstown Police Bench (on behalf of certain workmen lately in the employ of the company, who had obtained judgment against it for arrears of wages) of three of the carriages, one a first-class carriage, a second an intermediate one, and a third the third-class carriage—of the estimated value, in the aggregate, of between 500*l.* and 600*l.* The passengers by the train had to shift into two other carriages of the third-class description, and found their way to the Geelong terminus in regular time, so that no serious inconvenience was produced by this unfortunate *contretemps*. We say unfortunate, for it is obvious to all that such incidents operate very seriously against the best interests of the company, and should be avoided at any price, especially when it is considered that the money was owing to a hard-working and industrious class of men, who could not be kept out of it without serious inconvenience to themselves and families.

Meetings of Mining Companies.

CAMBORNE VEAN AND WHEAL FRANCIS MINING CO.

A general meeting of adventurers was held at the offices of Messrs. Harvey, Haymarket, Sept. 4, Mr. W. H. M. BLEWS in the chair.

The CHAIRMAN read the notice convening the meeting, and a statement of accounts, which showed a balance against the adventurers of 2342*l.* 9s. 7d. He observed, with reference to the accounts, he did not think the balance-sheet was presented in the right form. There was one item (151*l.*) paid for subsist, July and August, although the accounts were made up to June only. It was also put as a liability, when it ought to have been an asset, but he contended it ought not to have been introduced at all. In the last accounts the tin upon the mine was credited at 300*l.*, and realised within 3*l.* of that sum. In the present statement no credit was given for the tin on hand, and he considered they had no right to make a call *pro rata* unless they had a basis to work upon.

Mr. VAWDREY said the 250*l.* worth of tin would not be ready for sale within two or three months.

The CHAIRMAN considered in making a call they had paid 150*l.* off the debts.

Mr. VAWDREY, in answer to a question, said that the four months' coming cost he fully expected would be liquidated by the proceeds of the mine. (Hear.)

Capt. SWEENEY said they had come here to discuss accounts up to June, and had nothing to do with subsequent items.

Mr. PRIOR moved that the accounts be received, subject to the approval of the auditors.

Capt. SWEENEY seconded the resolution, which was carried unanimously.

Mr. VAWDREY then read the following report:—

Sept. 2.—The engine-shaft is down 7 fathoms below the 212; the lode is 15 ft. wide, varying in value from 25*l.* to 50*l.* per fm., and improving in depth. We purpose sinking to the 222, and then driving east and west, which will enable us to set 30 additional men to stope, and to supply our stamps without hindering the shaftmen, who will then continue to sink with all possible speed to the 252. This masterly tin lode in the bottom of the mine is similar, in every respect, to the productive and rich lode in the adjoining mine of Dolcoath, and when properly laid open will undoubtedly become equally profitable to the shareholders. The new shaft we have suspended until we have seen more of the bottom part of the mine, as our present shaft will enable us to discharge sufficient tinstuff to supply a 30-head stamps, and to prove the mine to a considerable depth below our deepest workings. The 212 end is driven east of the engine-shaft 36 fms., through a large tinny lode that will all be brought to surface, and will leave a small profit to the shareholders; in the present end we are carrying the lode 4 ft. wide, which is worth for that width 15*l.* per fm.; but having neither the north or south wall, we cannot say what size the lode may be. The stopes in the back of the 212 are worth about 3*l.* per fathom, and will only just pay for working. The 180, on Camborne Vean old south lode, is in from the shaft 35 fms., and is driving 8 fms. further east it will be under the valuable discovery in the level above; the end is driving by six men, with all possible speed, and we know not to a foot of ground when an important change may take place. Our expectations in this quarter are very high. In the 170 two men in the last two months have raised not short of 500*l.* worth of ore. When they first met with ore their pitch was 7 ft. below the 170, and 9 ft. west of the present end; it is now 4 fms. in depth and 4 fms. long, throughout which length there is a fine course of ore, which is lengthening out both east and west, and in the eastern end of ground the lode is rising up towards the 170 end, so that by driving this level a fathom or two further east it is very probable that we may meet with the same run of ore. In the last three months two men in the bottom of the 170 have worked away 10 fms. of ground, which on an average has yielded upwards of 50*l.* worth of copper per fm. This discovery is entirely in whole ground below the 170 and above to a considerable extent, and should we meet with the same course of ore in the 180, Camborne Vean will become a dividend-paying mine from this quarter alone for a long time to come. The 140, on the same lode, we commenced driving two months ago, and which has rapidly improved; it is now worth in the back and bottoms for 4 fms. in length 50*l.* per fm. In the present end there appears to be a small slide dipping east 6 feet in a fathom, and the course of ore is making on this slide, and fast lengthening away west; moreover, the lode has a north underlie, which is different to the other lodes in Camborne Vean, and may probably be in unwrought ground from the 140 to surface. Every day's work in this part of the mine is of the greatest importance, and should the lode continue its present course for a fathom or two further west, we shall have a more valuable discovery than has been seen in the mine for many years. The 106, on the north lode, is driven 41 fms. through a lode that is now working on tribute at 9s. in 1*l.*; the present end is worth 5*l.* per fm. On Saturday next the tributers' take in the bottoms of the 170 will expire, and we then purpose setting a winze to sink by six men and three lads in the ore ground, which will prove the lode in depth, and should it continue as rich as it now is we shall soon raise a magnificent pile of ore for the adventurers. Our copper ore sampling on Sept. 22 will be the best that has taken place in Camborne Vean for some years past, and we hope and believe the next will surpass it. Within the last three months we have remodelled our stamps' floors, and erected seven new frames, which enable us to dress our tin to our entire satisfaction. We have also laid out our tin-floors on the mine very compactly and conveniently, having our burning-house, dressing-yard, tin-house, and assaying office all enclosed within a wall, and under lock and key. The steam-whim and crusher are placed in good order, together with the roofs and stacks of the engine-houses, which were in a very dilapidated state, so that the surface of the mine wears a very different aspect to what it did a few months ago. After our next sampling we shall have to do some requisite repairs to the pumping engine, which at the present time is sadly out of order, and by which we shall save more than a ton of coal in 24 hours, and then the mine from top to bottom will be in first-rate working order. We cannot but congratulate the adventurers in these mines on the great and valuable improvements that have taken place underground since we have had the honour of being their servants, and we consider ourselves quite justified in assuring them that no more money will be required from their pockets to carry out our contemplated operations, and without any extraordinary good luck we may confidently look forward to an early dividend.—J. CURTIS, N. CLYMA, J. VIVIAN.

Mr. GROVES proposed that a *pro rata* call be made to liquidate the balance due by the adventurers.—Mr. J. JONES seconded the resolution, which was carried unanimously.

A SHAREHOLDER considered the report highly favourable. It was usual to assert that they were mere flummery, and only concocted to get calls out of shareholders. Although the report and accounts would be printed, and sent to the shareholders, he did not think that sufficient, and, as some might wish to sell their shares, it was desirable that the public should be informed of the great improvement; he believed it would considerably enhance the value of their property by the report of the proceedings appearing in the *Mining Journal*; he should move that a copy of that Journal be sent to every shareholder.

Capt. SWEENEY seconded the resolution, which was carried unanimously.

Mr. EDMUNDS said as 150*l.* had been charged for subsist, and as they had not taken credit for any tin upon the mine, there must be something in reserve.

Mr. VAWDREY reminded the meeting that he expected the next four months returns to meet the cost.

Mr. PRIOR remarked that the subsist should have been an asset, and not a liability, but it would make them much better the next two months.

Mr. EDMUNDS said, by the way the accounts were made out the liabilities were doubled to the amount of subsist and tin on the mine. He would move that the auditors be requested to make such alterations in the statement of accounts as they may deem correct, and that the same be forwarded to each shareholder.

The resolution was seconded, and carried unanimously.

A SHAREHOLDER wished to know the distance they had gone down at the new engine-shaft?—Mr. VAWDREY replied about 16 fms. from surface. It had been discontinued about five months.

The CHAIRMAN said that, as manager, he could save a considerable sum by buying the materials first-hand. There was no reason for not doing so, as more than two-thirds of the shares were held out of the county, and he believed they would not only save ten per cent. upon the bulk of the materials but obtain a much better article. A resolution was proposed—"That the manager be authorised to purchase the necessary materials for the working of the mine from the best sources, and be allowed his reasonable expenses."

Mr. VAWDREY said nothing could be worse than the present state of things, as they had been paying 18s. per ton for coals whilst their neighbours were obtaining the article for 14s. 6d.—The resolution was then unanimously adopted, and the report received.

Capt. SWEENEY considered their prospects very satisfactory.

Mr. PRIOR proposed a vote of thanks to the Chairman for his able conduct in the chair, and hoped he would long continue manager of the mine.

The resolution was seconded, and carried unanimously.

A SHAREHOLDER suggested that a report should be printed, and sent to the shareholders every month.—Mr. PRIOR: If sent to the *Mining Journal* it would answer every purpose.

The CHAIRMAN said if an important improvement took place a special report would be sent.

DRAKE WALLS MINING COMPANY.

A general meeting of shareholders was held at the company's offices, Moorgate-street, on Thursday, Mr. W. LITTLE in the chair.

Mr. HIRAM WILLIAMS (the secretary) read the notice convening the meeting, the minutes of the previous meeting, the agents' report, and the accounts, from which the subjoined are condensed:—

Sept. 7.—Betteley's engine-shaft is 8¼ fms. below the 92, the branches in which are producing some moderate work for tin, intermixed with a little copper ore and wolfram. We expect to reach the proper depth for a 100 fm. level in about seven weeks from this date. The 92, east of Betteley's, has been communicated with the 92, west of Matthews's shaft, tramroad laid down, and made complete to within a few fathoms of Matthews's shaft. Since those levels have been communicated we have set two new stopes in the back of the 92, which are producing some good work. The 92, east of Matthews's, is extended 32¼ fms., 6 fms. of which have been driven since last meeting; the branches in the present end are producing some saving work, intermixed with wolfram and mundic. We have three stopes working in back of this level, which are producing saving work for tin, and some rich copper ore, which continues to hold down from the 70 and 80. The 80 has been extended since last meeting 5 fms. 3 ft. 9 in.; the ground has been rather hard, and the branches have produced but little tin, very similar to the 70; at or about this point, in a short time, we may fairly calculate on having a similar improvement to the 70. We have two stopes in back of the 80, which are producing coarse work. The 70, east of Matthews's, has been extended since last meeting 4 fms. 2 ft. 6 in.; the branches in this level are producing good saving work, and the appearances, altogether, are very satisfactory. There are three stopes in back of the 70, which are producing saving work. As we open new stopes we may reasonably expect an improvement, judging from the present end. The 70 cross-cut north has been extended since last meeting 7 fms. 0 ft. 6 in., where we intersected the lode, which has been cut through, and found to be from 4 to 5 ft. wide, composed of capel, peach, quartz, and a little copper ore, but nothing to value. We have opened west on its course 5 fms., and again cut through it, at which point it is becoming more settled from the influence of the cross-course, and producing a little ore, but not to value. We propose to push on west to the great cross-course (distance 35 fms.)—a very important point to be kept in view. We have extended the 60 since last meeting 6 fms. 0 ft. 5 in., through moderate tin ground, and the branches in the present end are producing good saving work: we have three stopes working in the back of this level, which are producing saving work. The stopes in the 40 are producing moderate work. A stope below the 70, west of Betteley's shaft, to drain the western part of the mine, has been continued, and the old level and stulls repaired. We are pleased to inform you that an improvement has taken place in the branches, which are now producing very good work, and we are making every effort to drain the old bottoms, which will enable us to resume full work in the western part of the mine. The 80, west of Betteley's, is 22 fms. behind the stope below the 70; it is, therefore, very desirable to resume the driving of the 80 west with as little delay as possible. The deep adit has been extended since last meeting 5 fms. 1 fm. 9 in. on the course of the lode, which is from 4 to 5 ft. wide, composed principally of mundic and peach. We have not as yet intersected the cross-course said to be some few fathoms ahead. For the proper development of the mine, and agreeable to the wish of the committee, we have had employed on dead work, such as sinking the shaft, draining the western mine, cross-cutting north, and driving the deep adit, 27 men, which has added to the cost of the mine about 130*l.* per month, and will account, in a great measure, for the loss on the past quarter. It is now fairly presumed that we have a good discovery in the western part of the mine, which will enable us to increase the returns, and bring the mine into a paying position. We have employed in and on the mines 386 persons, 33 of whom are engaged in sinking and driving, and 108 in stopes; the remainder are employed in dressing, trimming, pilling, landing, &c.—T. GREGORY; J. ANDREWS.

Mine cost, April, May, and June	£3896	10	9	
Rent of water-course and sundries	82	16	2 =	£3979 6 11
Tin sold	£3445	1	5	
Arsenic, &c.	86	13	8	
Difference in estimated value of tin ores	11	8	5 =	3543 3 6
Leaving balance against mine				£ 436 3 5

Mr. HARRIS enquired what opinion was really entertained with regard to the mine, and whether their prospects had improved or otherwise?

Mr. HIRAM WILLIAMS replied that the western part of the mine seemed to be improving, and, taking the report as his guide, he would say that their prospects were better.

Mr. BETTELEY had written to his son, who was an *employé* at the mine, but could not find that there was any material improvement in their prospects.

A long and highly personal discussion, in which Messrs. Hodgson and Betteley took the principal parts, followed with reference to some shares connected with the estate of Mr. P. Stainsby, but the remarks appeared to concern Messrs. Hodgson and Betteley only.

After much opposition from Mr. Hodgson, it was agreed that a letter from Mr. Tyrie should be read, although dissatisfaction was felt that Mr. Tyrie did not personally attend. The letter stated that his opinion was that considerable loss would continue until the shareholders were worn out with calls, if the present system were allowed to exist. He was anxious to avoid debt, and, therefore, wished that another call of 1s. might be made. This was opposed by Mr. Hodgson, on the ground that they had better have a 2s. call next time than two 1s. calls. Only six shareholders were present, and on the question whether the call should be made three voted each way, but as Mr. Hodgson (who had throughout had the cost-book, cost-sheets, &c., by his side for reference) had not paid his calls his vote was, in accordance with the 15th rule, not received, and the call of 1s. per share was made.

The next business of the meeting was the election of directors. Mr. Little expressed his intention to retire, and upon Mr. Betteley being proposed for re-election such a lively opposition was made by Mr. Hodgson that most of the shareholders left the room, expressing their disgust that such personal matter should arise. The chief complaint made by Mr. Hodgson appeared to be with reference to the transfer of some shares, and in support of his case he showed the outside of a letter bearing a postmark dated May 4, which he "neither had nor intended to open" at present, from which, of course, no satisfactory conclusion could be arrived at.

RIVER TAMAR COPPER MINING COMPANY.

The first annual general meeting of proprietors was held at the offices of the company, King's Arms-yard, on Aug. 31,—Mr. ALFRED SMEE in the chair.

The SECRETARY read the notice convening the meeting, and the minutes of the last, which were confirmed.

The report of the directors was read, from which the following is condensed:—

This company took possession on Sept. 1 last of the mine, and since that period the operations have been prosecuted with the utmost vigour, in order as speedily as possible to prove the resources of the mine. The operations have been confined to two points—the sinking of the engine-shaft and the driving of the shallow level. During the past year the shaft has been sunk from the 58 to the 70, on which a cross-cut has been driven north about 10 ft., and the lode intersected and opened upon about 3 fathoms in length. The depth of the 70 is probably sufficient to indicate the value of the lode, and the directors desire thoroughly to examine this level before they incur the expense of any further sinking. In order to examine further this main lode in the killas, and also to search for other lodes, a shallow cross-cut adit has been driven about 150 fms. west of the engine-shaft. In this drivage several branches of ore have been found, and it is probable the lode will be reached within a short time. During the past year the steam-engine has been in excellent working order, no repairs having been required, and the other machinery and buildings are in a most satisfactory state. Notwithstanding the state of the money market at the time the company was formed, upwards of two-thirds of the capital stock have been subscribed for, chiefly by the former holders of the mine. The financial concerns have been conducted with the utmost economy and care. The directors are desirous of allotting the remainder of the shares to any approved applicant; nevertheless, as a discovery of ore has been confidently anticipated on the western side of the cross-course, the directors have made arrangements to close the list instantly ore is reached, when the remainder will be offered to the present adventurers. Considering that the shaft is now sunk in the most perfect manner to the 70, and that the machinery and buildings are all nearly new, and of the best possible description, the directors consider the adventure well worthy of the consideration of the public, especially as the mine joins, and is surrounded by, the Hingston Down, the Bedford United, and the Devon Great Consols Mine, of world-wide celebrity. Capt. J. Cock in his report states—"I would not recommend the sinking of the shaft until a further trial has been made in the 70, but I am of opinion that discoveries will soon be made sufficient to justify the sinking for another level."

A statement of accounts from 1st Sept., 1857, to 31st July, was submitted, from which the subjoined is condensed:—

Deposit of 5s. per share on 6810 shares	£1702	10	0	
Advance by directors	300	0	0	
Merchants' bills	180	10	11	
July cost sheet	63	12	10	
Duchy office for rent	40	0	0 =	£2286 13 9
Purchase of mine	£ 500	0	0	
Mine cost and merchants' bills to July	1147	8	11	
Mine expenses	168	1	7	
Charges	336	19	1 =	2152 9 7
Balance in favour of adventurers				£ 134 4 2

The CHAIRMAN, in rising to move the adoption of the report, said he had not many observations to make; the property, as they were aware, was a very large tract of ground, bounded by the River Tamar, and surrounded by the Hingston Down, the Bedford United, and the Devon Great Consols; in fact, they were in the midst of dividend-paying mines. They had during the past year confined the working to the south part of the mine to reach the 70, a point at which they hoped to meet with success. They had received this morning a report which stated that they had reached the cross-course in the 70 west, and cut into it 2 ft.; the water coming from it was very strongly mineralised, and there was a great probability of soon meeting with something remunerative. The shallow adit level was looking kindly, and the cross-course was producing good gossan, which Capt. Cock thought was an indication of a lode being near. In driving 10 or 15 fathoms further they expected to intersect the tin lode. Seeing that the ore had a tendency to run westward, it was desirable to ascertain the direction of the lode, and for that purpose they were driving a cross-cut, but had not yet reached the lode. The levels had been driven at a very small cost, and they would soon know whether they would meet with favourable results. With regard to the materials on the mine, he could give a very good account of them, as they had a first-rate steam-engine, valued at 1300*l.*, and the total amount of the materials was estimated at 2678*l.* 16s., showing that they had a considerable amount of property on the mine for the money already subscribed. He (the Chairman) would have been glad to put off the meeting for two or three months, by which time they hoped to know the exact state of the lode in the 70, but as at the formation of the company it was promised to be held within twelve months; it had been deferred until the last day, in the hope of having more definite information to lay before the shareholders, as they confidently expected to find a course of ore in the 70. He had received two or three communications respecting the issuing of the shares. It would be seen by the accounts that 6810 shares out of 10,000 were allotted, which, considering the company was launched when the commercial crisis was at its height, was really wonderful. The directors considered the best course to pursue was to continue allotting them to the public until they found a course of ore, and immediately the discovery was made to stop all further issue, except to the existing shareholders *pro rata*. The mine had been conducted as carefully and economically as possible, and their whole energies had been concentrated to one spot, which he hoped would be attended with success, and that in a very short time. The Chairman concluded by moving that the report and accounts be received and adopted.

Mr. BEALE seconded the resolution, which was carried unanimously.

Mr. LEWIS had great pleasure in moving the next resolution. He considered they were much indebted to the directors for the attention they paid to the concern. He considered it a most satisfactory report, and that they were making excellent progress without being put to a very great expense. The value put upon the machinery and materials proved the favourable position they were in. He would move that the cordial thanks of the meeting are due, and hereby given, to the directors for the able manner in which they have conducted the affairs of the company, and for their zeal, ability, and assiduity in promoting the interest of the shareholders.

The resolution was then seconded and carried unanimously.

Mr. THOMAS said as it was proposed to stop the issue of shares when they found the ore, how were they to know the number of shares on hand?

The CHAIRMAN replied that notice would be given immediately to every shareholder.

Mr. THOMAS said they might write up from Cornwall for a large number of shares and get them, while those living at a distance would hear nothing about it. He resided in Ireland.

The CHAIRMAN said, if application was made for a large number of shares it would arouse their suspicion, and they would not be answered until the reason had been ascertained. He was much obliged to them for the vote of thanks to the directors, and he could assure them that he was extremely desirous of making it a paying mine. They might meet with great success, and could not meet with very heavy loss.

The retiring directors and auditors were re-elected, with a vote of thanks for their past services. The proceedings terminated with a vote of thanks to the Chairman.

MINING MARKET.—We have received the following communication:—

From Mr. LELEAN:—A very active business has sprung up within the past fortnight for good dividend and progressive mine shares, and as the prices of metals are more likely to advance than otherwise, it is likely that an increased demand for this description of property will continue throughout the year. People will soon be returning to town from the sea-side, and their attention will be directed to stock that will give the best interest for their money, with a corresponding risk and security. While they look at the miserable pittance the railways pay, compared with our Cornish mines, and contrast the one with the other, there is no doubt as to the result. I consider the following dividend and progressive mines, in which a fair amount of business has been done during the week, worthy the attention of capitalists:—Providence, Mary Ann, Wheal Treiawn, Old Tolgus United, Margaret, Pendeen, Margery, Wheal Charlotte, Toivadden, Great Wheal Vor, Drake Walls, Wheal Wrey, Caruyorth, East Russell, Penhaidarva, Great Alfred, South Frances. Amongst those of a speculative character, in which I consider the chances good, at present nominal quotations, are—Beil and Lanarth, West Pen-Butler and Basset United, East Providence, North Crofty, Camborne Vean, West Grenville, Wheal Grenville, South Buller and West Penstruthal, Bryntail, South Condurrow, Angarrack, Great Wheal Busy, Ding Dong, Kelly Bray, Redmoor. Providence Mines have divided 10*l.* per share, besides paying about 4000*l.* for new machinery in the past 12 months, and it is fully expected that the next dividend, in Nov., will be 4*l.* Margaret is beginning to make a profit. Wheal Charlotte made 215*l.* profit in the last two months; the mine is opening well, and is becoming exceedingly productive. Mary Ann dividend on the 14th inst., is expected to be 2*l.* 5s., with increased balance. Toivadden is opening the richest copper mine in Cornwall. See the Ticketing Paper in the columns of this Journal. Old Tolgus United presents every appearance of becoming the greatest prize of 1859; the works are being prosecuted with vigour, and the concern is well managed. Wheal Beil and Lanarth is a speculation equal, in my opinion, to any in Cornwall. Wheal Kitty (Lelant) is likely to advance in price, now that the dispute is settled with the Wheal Mary adventurers. East Basset and East Russell are both selling high; the question is, will they cut the lodes rich? If so, shares are likely to advance. Devon Great Consols and Par Consols are selling very high for the dividends they are paying, and it is reported that the samplings are likely to decrease. South Caradon is a good mine, and

...ows are firm at 400*l*.; still, a good thing may be bought too dearly. The accounts from South Frances, Wheal Basset, Wheal Buller, and West Seton are not so encouraging as they have been.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

We are assured by a correspondent, who has lately made an extensive tour through West Cornwall, and who from practical experience is a competent authority, that the mines generally are much improved in their aspect within the last three months. Several of the discoveries of importance continue to "hold on;" this is particularly the case at Camborne Vean, where the lode in the 170 is a noble one. Several new mines are about being opened up, and speculation is buoyant. Many Cornish buyers are in the market for sound progressive mines, whilst dividend stock advances in value weekly. This is not to be wondered at, seeing they were so unduly depressed a few months since. Many sound progressive stocks have been actually quoted at half the value of the plant on them, though the mines were known to be paying their way, or nearly so; the Cornish adventurers knowing these facts, have been investing in such, and will certainly ere long reap the benefit of their outlay. The readiness with which machinery on abandoned mines is purchased is also an evidence of increased energy; the stopping interest too is more active—indeed, every branch connected with mining feels more or less the change for the better. It is gratifying to find the mines themselves at no juncture are, as our friend writes, showing decided symptoms of improvement. We know some mines have been unduly depressed from the dishonourable practice of "bearing" the market, and others from the foolish system of puffing them beyond their merits. Those paltry methods soon expose themselves; being fictitious, they cannot long exist; when detected, reaction deservedly ensues. The "brewer of mischief frequently falls into his mash tub," but, unfortunately, he too often causes the innocent and unwary to be injured as well as himself. Honesty is the best policy in this as well as all other professions, and we rejoice to be able to announce a decided advance towards prosperity.

PENSTRUTHAL MINE (Redruth).—The discovery reported in this mine was made by a cross-cut north: several tons of beautiful ore are at the surface, and preparations are about being made to effectually develope its supposed riches. We shall be required to give a more detailed report in our next. This mine being situated in so important a locality, and having incurred a large expenditure, it is pleasing to learn they have prospects of being rewarded for their perseverance.

At NEW WHEAL FRANCES, the Wheal Top lode has just been cut in the deep adit, and though only in the cross-course, some first-rate stones of tin have been broken, and great things are expected in driving off from the cross-course. The lode in the shaft is valued at 40*l*. per fathom, and as the shallow adit was worked away by the former party as deep as they could go for water, and as a good lode of tin is known to exist there, something good is naturally expected at the deep adit, which is 11 fathoms deeper than the shallow one. Very few new mines appear to me to bid so fair for making early profit.

At GREAT WHEAL ALFRED, the prospects are most cheering; the lode in the shaft holds good, with a fine course of ore, and the 190 is expected shortly to improve, fine courses of ore having gone down in the level above; looking at the situation of the elvans in connection with the lode, it is the opinion of first-rate mineralogists that great courses of ore will be met with when the shaft is a few fathoms deeper.

WHEAL TRELAWNY sold, on the 4th inst., 145 tons of silver-lead ores, realising 2476*l*., and 1 ton of copper ore, at 14*l*. 8*s*.; this will leave a profit of about 600*l*. on the month's workings. The last sale was not equal to anticipation, in consequence of the recent fall in the price of lead, but the present sale has been compensated by the increased quantity of silver.

It is thought the lode discovered at the part of GREAT WHEAL BUSY called Wheal Seymour is the same the East Wheal Busy adventurers are now working: this has placed them in high spirits. To ascertain it, men are to be sent into the deep or county adit to search, as it must be cut in it; it must also enter their sett somewhere, and if diligently sought will be found. The tributers still continue to meet with stones of beautiful grey, black, and malachite ores; many of them are beautiful specimens. The reprehensible practice of pocketing specimens has been practised here to such an extent that they estimate ¼ cwt. has been carried off; they now have boxes, into which they place them under lock and key as soon as raised. The East Wheal Busy people say upwards of 5 cwts. were carried off by the public, chiefly on Sundays, when their discovery was made. Taking a specimen or two is not looked on as stealing; but when it comes out of the earnings of the poor miners, it is of serious consequence to them.

CRANSTON MINE (Ilsington) has been taken up by an influential company in the North of England, whose operations have been confined to the development of the several lodes, preparatory to more energetic operations. Several important discoveries have been made, especially for tin, and from its proximity to the Ashburton United Mines, there is little doubt but the lodes will become highly productive. A sample has been tried, and found by assay to produce 14 in 20 for white tin, which, according to the present value of tin, is estimated worth 70*l*. per ton. The locality being a well-known tin district, there is every reason to anticipate an early and profitable mine, and hope shortly to be able to congratulate the proprietors in realising their most sanguine expectations.

TYWARNHAILE MINE (St. Agnes).—We understand this mine is now really likely to be resumed. The engine is ready to work at once on the word being given. It is melancholy to see so magnificent a property idle so long. Surely a shoulder could be put to the wheel with effect, were the trial made. It is known beyond all doubt the mine would pay, if worked.

The announcement of the failure of Messrs. POWELL and COOKE, the well-known mine brokers, was received in Cornwall with universal regret, but not with surprise. It was known they were largely connected with mines in the Tavistock district, where matters have not of late been in a flourishing condition. This, together with the stagnation universal in mining, is supposed to have crippled them. They have the sympathy of all the mining community, and should they recommence business in the same line will certainly receive the same confidence and support from their mining brethren they have always done, and have so well deserved.

EAST WHEAL MUSIC (St. Agnes).—It is rumoured this mine will be worked by a London party; the splendid lode discovered here produces ore nearly at the surface. As was the case in the old mine, where the eccentric but fortunate Capt. Oates realised his immense wealth, it is supposed by many this is another outcrop of ore on the same lode. This and Wheal Ellen lodes are ascertained to pass through the sett. Mr Henwood is engaged to visit the mine and report thereon. His opinion of the ground we probably shall publish.

At the setting of pitches at GREAT WHEAL BUSY, on Saturday last, there were but few bargains refused at captain's prices; the few were readily taken by others immediately. On the aggregate they were let at a reduction of at least 12 per cent. from last month's setting. No better argument can be adduced of the improvement in the mine. Upwards of 600 people are now employed, which large number will be increased as soon as the western, or Hallenbeagle part, is at work. The foundation of the engine-houses were laid on Saturday, and will be finished as quickly as possible.

SORTRIDGE CONSOLS.—From a private and authentic source we learn that the 50 west is improving, with a very kindly end. The lode in the 40 west is holding fully as good as last stated. The mine is evidently progressing towards a general improvement.

Two tributers at GREAT WHEAL BUSY have undertaken a setting for three months, to sink a shaft from surface to the shallow adit, about 16 fms.; in doing so they have cut through some magnificent gossan, containing squats of rich black and grey ore, with malachite and carbonate of copper. Although only down 11 fms., they have secured about 2 tons, worth full 15*l*. per ton; this may turn out a fine thing for the Wheal Busy adventurers, if the lode hold on and improve as it goes down. This instance plainly shews the benefit of setting work to tributers, as they are the real adventurers, the proprietors of the mine only finding the setts and machinery; these men pay the Busy adventurers 6*s*. 8*d*. in 1*l*. for the ore they raise. We are assured the great mine looks well, and is hourly improving in the bottom levels, where fresh ground is being opened out.

CARMARTHEN UNITED.—A great improvement has taken place in the mine during the past week; rocks of lead have been brought to surface weighing from 100 lbs. to 120 lbs. each; and the lode in the shaft sinking under the 12 is producing over one ton of lead per fm.

GREAT SHEBA MINE.—The works on the lode that was to have paid a dividend one year since, according to Capt. Spargo's report and imagination, is at length stopped, after an expenditure of 33,000*l*.; the ore being poor, the backs worked out, and used up, and the lode in its present state commercially unproductive. A roasting apparatus is now being prepared on the mine. The captain pledged his word that he would get capitalists to oppose the smelters by erecting works on Sheba Mine, and now the threat is being carried out. The captain has pursuaded the directors to build a furnace and roast the ores—the poor ore, now worth less than 1*l*. per ton, he says will then be worth 5*l*. per ton; and this roasting affair he affirms can be carried on without coals, or very little, the sulphur in the mundic being quite sufficient to keep the fires alive, and the dividends will be really paid.

It is reported that several of the Iron Mines lately in abeyance on account of the low prices of iron ore are about to be resumed; this will be a great boon to the neighbourhood. Harvest operations have given employment to many of the men from these works, who generally are not deep underground men, but usually farm labourers, who do very well for iron-works, which are generally at or near the surface, and do not require the skill or practice of an experienced miner, as tin and copper mines do. We hope the demand for this branch of industry may continue, as it augurs well for other interests as well as iron mining.

A great demand exists for MUNDIC ORES containing a small percentage of copper, and agents are engaged to buy up small parcels at the various mines. A few mines are wrought wholly for this mineral, as at Nangiles, where large quantities are procured; these ores, being usually the refuse of the copper, cost the companies very little, as they must be raised; it fetches from 15*s*. to 25*s*. per ton.

ARSENIC is more in demand: the price for the ores has been exceedingly low of late: an improvement has taken place, but the purchasers are not anxious to lay in stocks of the article. Many enquiries have been made for BISMUTH ORES, but these are very scarce in Cornwall, and have only been found in two or three mines, and in them not plentifully, though some rich parcels of the carbonate of the metal have been raised and sold. Our object in stating this is to let our readers know there is a market for the mineral, if they have it.

BASSET CONSOLS MINES (St. Agnes).—These mines are on the south-west of the great Tywarnhaile Mines, and are worked for copper and lead; at present they are only wrought above the adit level. There are five east and west lodes, and one north and south lode, from 2 to 4 feet wide, of a flookany character. The former are worked for copper ores, and the latter for lead. The present party confine their operations to exploring the lodes cut in the adit by the former proprietors, they having devoted their energies to lead only. The new company have raised and sold about 120 tons of copper, of the value of 600*l*., and this within the last eight months; they have 20 tons now at surface. On the lead the works have hitherto been limited for want of ventilation; a new shaft has been sunk from surface to the shallow adit 30 fms., and is now set to sink to deep adit, 42 fms.; in doing the above work, about 1½ ton of lead has been procured. On the mine are four whims, no machinery having yet been required. Should the great Tywarnhaile go to work, as is confidently expected, this mine would be considerably assisted, as it would be drained by that engine to a considerable depth. The speculation is looked on in the locality as a most promising undertaking; the shares are principally, if not wholly, held in the neighbourhood. At the general meeting the report gave great satisfaction to the shareholders present, who all expressed their entire confidence in the undertaking and management. The accounts showed a balance of 30*l*. 7*s*. 10*d*. against the adventurers, after four months' work, including the sinking the shaft and a new whim. Several specimens of rich copper ore were exhibited. A call of 5*s*. per share was made, which it is fully believed will place this property in a prosperous condition.

NORTH WHEAL BUSY has sold 120 tons of blende ore, at 3*l*. 4*s*. per ton. This is a great feature for this young mine: little doubt exists but copper will be found in depth beneath the blende.

The accident at the UNITED MINES (Gwennap), occurring so quickly on the disaster at Porkellis United, caused a great sensation, and most exaggerated rumours of all kinds were prevalent, some reflecting most severely on the management, others on the dangerous nature of the machinery itself. We were at some pains to gather the facts, and visited the man, Richard Thomas, who was most injured; his statement is that the rods did not give way, that the machinery was in good order, and that the agents were in no way to blame. He says, "I was coming up the shaft when the rod by some means struck a sollar, which gave way and fell on the next, carrying it down to the next, and several were thus knocked out; I, hearing such a noise, thought the shaft was all coming in about me, and Porkellis flashed across my mind at once. I jumped into the ladders, and was struck by the falling timbers. No one fell down the shaft. I was much bruised, but no bones broken." Immediate steps to repair the injury were taken, and the work will suffer but little interruption. It is but justice to all to publish the above statement, as rumour of evil or faults never loses by repetition.

NORTH TRESKERBY MINE.—An engine is to be erected here forthwith; preparations are making for actively working the splendid lode discovered. The country is a most beautiful killas, the gossan rich, and the ore of the most valuable quality. It is still rumoured the Great Treskerby, North Downs, and Wheal Chance are to be worked by a powerful company in one grand united series. Should that be the case, this once famous district will again flourish.

ALVENNY MINING COMPANY.—In our last Journal, we alluded to the very promising prospects of this undertaking, and since our former notice its success has been progressive. This company does not depend for its advancement merely on the opinions of the most competent mining judges; it is based on even more certain and unerring grounds—the experience of its former workings, which are matters within the immediate knowledge of the mining public. This highly productive property, when previously worked, although very imperfectly, with incomplete machinery, and at very little depth, was highly remunerative; it will, however, henceforth possess all the advantages of the most improved modern appliances on an enlarged and perfect scale. The power at the command of the former proprietors was known to have been unequal to the work, and its inefficiency was succeeded by dissentions amongst the parties interested—two causes sufficient to depress the most hopeful enterprise. Large deposits of ore were, however, known to exist at the time when the above causes combined and operated unfavourably; there is, however, now no reason to doubt that, under the present efficient management, the invariable rule will be found to apply to the Alvenny Mine in its most extended sense, and that the deeper workings will be found by far the most productive. We learn that an engine of ample power is ready, and about to be immediately erected, which will be set to work forthwith to clear the workings of water. When this shall be effected, the company will be at once in a position to send ore in large supplies into market. We refer to the prospectus which appeared in our last Journal, and it may, we should say, be predicted that the Alvenny will soon be found amongst the dividend-paying mines of Cornwall. We may repeat, this mining enterprise is more than a speculation, it is a safe investment.

RIBDEN MINE (North Stafford).—They have made a very nice discovery in clearing out the footway, and are now breaking some fine specimens of copper and lead, about 25 fathoms below surface, which will greatly add to its value. The machinery being now all right, returns will soon be made to pay the working cost. This concern is one of great interest, inasmuch as, I believe, the future development of the mineral resources of this district mainly depends on the success of this mine.

WORTHING MINING COMPANY.—Despatches were received on Saturday last from the Worthing Mining Company, dated July 4 and 8, conveying the most favourable account of the prospects at the Bremer Mine. If we may venture to anticipate good results, or calculate on the realisation of wealth in prospective, we think the last accounts are more than likely to encourage even the most sceptical. Although the operations have been confined chiefly to the driving of the 12 fm. level, we learn from the captain's report that the lode, north of Watton's shaft, is from 12 to 18 in. wide, composed of black sulphurets, malleable copper, and quartz, which has been set at 9*l*. 10*s*. per fm., leaving at the end of the mouth about 8 ft. of the lode to take down, which, on resuming the following month's take at 10*l*. per fm., the 8 ft. were removed, and in two days the quantity broken was estimated at about 100*l*. The lode between Watton's and Hocking's shafts is considered richer than previously anticipated. There is a good course of black ore at Hocking's shaft, and in driving both north and south of the same shaft the lode is found to contain malleable copper and rich black and grey sulphurets, making a good paying lode. The whole of the report is of a most cheering character, and we look forward to the next accounts with considerable interest, when, no doubt, sufficient will have been developed to pronounce the Worthing Mining Company to be shortly in a dividend position. We refer our readers to the report *in extenso*, which will be found in another column.

The ENGLISH AND AUSTRALIAN COPPER SMELTING COMPANY are now paying a dividend of 2*s*. 6*d*. per share, being the fourth dividend, amounting in all to 10*s*. The works are situate near the Burra Burra Mines, South Australia, and, from present prospects, it is anticipated that the dividends in future will be half-yearly.

MINING IN PIEDMONT.—A *Société Anonyme* has recently been formed, under the auspices of Messrs. Bischoffsheim, Goldschmidt, and Co., for the working of a valuable vein of nickel, situate at Locarno, in the Piedmontese Alps; and in the same chain of mountains there likewise exist other veins of the same metal, capable of being immediately opened. These veins, which are situated in Switzerland, in a highly metalliferous canton, in the vicinity of the Tyrol, are in most instances met with in contact with a very regular serpentine, and there is no doubt that the serpentine has served to focus the metalliferous emanations, which proves that the nickel deposits run nearly parallel to the serpentine, and that the nearer they come thereto the richer and larger they are. Sometimes the nickelliferous ores are hydrated, and sometimes they contain arsenic. Exploratory operations have proved the existence of 11 veins of nickel, of great value, and very regular, their course being traceable for a great distance. M. Theobald, the well-known professor of geology, has carefully described the various veins in a recent treatise, which is a sufficient evidence of their actual existence. In the same concession rich sulphides of copper are found, and the working of both metals would be easy and inexpensive, since by means of a level the veins may be explored to the extent of at least 1000 metres. These concessions, moreover, offer other important advantages; labour is cheap, timber can be purchased at a low rate, the payment is by a fixed royalty in proportion to the ore raised; operations may be carried on without any restrictions, waterfalls are abundant, and the concessionaire has full power to utilise them; the surface necessary for the efficient working of the mine, and belonging to the commune, can be employed without indemnity; several large tourbières are in the immediate vicinity, and the peat can be used as fuel for the reduction of the ores. A railway, which is already open to Choire, will shortly pass within 21 miles of the mines, so that there will be every facility for bringing the produce to market. An advertisement, offering the transfer of this property, appears in another column.

CORNISH MINING MAXIMS.—No. V.

"WHEELS WITHIN WHEELS."

The application of this adage, we think, is so self-evident to mining undertakings in almost every clime, that lengthened comment would be almost superfluous, were it not that the adage is repudiated by every promoter of a mining speculation or adventure. Every one protests his to be free from anything like secret or unseen motive in his endeavour to favour the public; he asserts his to be purely a *bonâ fide*, disinterested, fair, and above-board scheme, yet if the glowing prospectus be carefully studied the little pinions on which the whole affair rests may be detected. It is generally found where the greatest endeavours have been made to hide the machinery the "wheels within wheels" are the most numerous and most extensive. How many gold schemes have had their "wheels within wheels" laid bare—aye, and Cornish, Welsh, indeed all mines in all counties, have from time to time been exposed. We believe, however, fewer of the delusive schemes and self-inviting mines are to be found than ever was the case. Adventurers are too wary now-a-day to enter on speculations where all the speculation is on their part: the situations, the erection of machinery, sending in supplies, and free shares on the part of the promoters, we say we verily believe far less of that kind of practice is prevalent than formerly; the very magnitude of the practice worked its own cure, and a more wholesome state of things has been engendered and built up in their places. It is gratifying to find this to be the case for the very cause of mining itself, as it must tend to inspire confidence and extend its connections. We know many instances in which worthy and wealthy men have been induced to embark, but when they detected the "wheels" have thrown up their shares rather than be led into secrets that they knew not of. It must be admitted that mining has had its full share in such works; it must be also granted that it has had more than its share of stigma and odium. Now that a better system is adopted, it is to be hoped as liberal a policy will be pursued by capitalists, and that they will more readily embark in interests proved beyond all gainsay to be one of the best paying and most secure of all our national resources, employing the most industrious, patient, and deserving of our working population, whose endeavours not only maintain a vast number of their own class, but a large staff of able and intelligent superintendents; not only are these benefited, but shipping, manufacturers, and tradesmen, are all seriously affected by the prosperity or adversity of mining. The lords of the land, by their diminished dues, too suffer to some extent, but they and the farmer are almost to the same degree as the other classes enumerated. We, therefore, invite them to join, feeling assured they may now do so with comparative safety: the Augean stable has been swept: the harpies have been scared, or are known; the demand for the metals is good, and likely to be permanent; but before they rush into speculative undertakings to carefully examine them in all their bearings, to bear in mind our motto, and observe the "Wheels within wheels."—GEORGE HENWOOD.

LOUISA CREEK DIGGINGS.—During the past week a very auriferous quartz vein has been opened at these diggings, and promises to be highly remunerative to those taking up claims. Our informant (Mr. Gooch) came in from the locality last Saturday. He states that all are in high glee there, and that everyone thinks more will be done than on the old vein (that was worked by the Colonial Gold Company, under lease from the Great Nugget Vein Company). Strange, that with fresh reefs of gold-bearing quartz being opened nearly every week in this western district, and paying those occupied upon them with the most simple appliances, some enterprising parties do not invest a sufficient amount of capital in machinery, not only to assist the workers on the quartz veins, but at the same time to get a good return for their outlay, and also swell the escort returns. We understand, from undoubted authority, that good and proper steam machinery, &c., can be erected, that will crush ten tons of quartz in fourteen hours, at a cost of 2000*l*.—*Bathurst Times*.

FOREIGN MINES.

NEW GRAND DUCHY OF BADEN MINES.—S. Richards, Sept. 6: At the Schindler Mine, the lode in the old, or engine-shaft, is 5½ feet wide, and worth 15*l*. per fathom. The lode in the 34 south is about 2 feet wide, and worth 8*l*. per fathom. In the same level, driving north by the side of the lode, the ground continues moderate. The cuttings for the railway are proceeding rapidly. The rock and craggy parts of the mountains will, I hope, be got through by the end of the present week, when the laying of the rails, which is already commenced at the eastern part, will be hastened on with an additional number of hands. In the Teufelsgrund Mine, the lode from the different points in operation at Louisen level is producing, on the average, about 7 cwts. of ore per fathom. At Wilhelm's level the stopes are producing 6 to 7 cwts., and at Frederick's level the stopes are now worth 8 cwts. per fathom. There is nothing new of importance in any other part of the mines since my last report.

LUSITANIAN MINING COMPANY—Aug. 27: Palhal Mine, Bastos Lode: The ground in Taylor's engine-shaft, sinking below the 38, is still hard. The ground in the 38, driving south of Taylor's engine-shaft, is the same as for some time past. In the 38 cross-cut north we have got through the part of the lode we have been in for some time past; but not having cut the soft part of the lode, are inclined to think there must be a part further north, for proving which we shall drive a fathom more in that direction to find it. The lode in the 28, driving west of Taylor's engine-shaft, is 1 foot wide, composed of quartz and flookan. The 28, east of Taylor's and west of River shafts, are communicated, and as soon as the men have squared up the ground to make the level good, we shall turn the lift in River shaft idle until we are ready for sinking that shaft below the 28. The lode in the 28, driving east of River shaft, is 2 feet wide, composed of quartz and a little prian. The lode in the 8, driving east of the same shaft, is 2 feet wide, composed of quartz and stones of ore. The rise above the 8, and the winze below the adit, east of River shaft, are holed, and the men removed to their former place. The lode in the adit level, driving east of Pinto's shaft, is split in two branches, and the men are now engaged in taking down the south part of it, which is composed of quartz and a little flookan. The lode in the adit level, driving south-west on the slide lode, is 1½ ft. wide, composed of flookan and killas; in this end we have met with another small branch going off in a westerly direction. The lode in the stopes No. 1, in the back of the adit, east of River shaft, is 1½ ft. wide, worth ½ ton per fathom. The lode in the stopes No. 2, in the back of the 18, west of Butler's winze, is 1 foot wide, worth 1½ ton per fm. The lode in the stopes No. 3, in back of the 28, east of Fontouro's winze, is 1 ft. wide, worth 1 ton per fm. The lode in the stopes No. 4, in back of the 28, west of Fontouro's winze, is 2½ ft. wide, worth 1½ ton per fm. The lode in the stopes No. 5, in the back of the 28, east of Oieveira's winze, is 1½ ft. wide, worth 1 ton per fathom. The lode in the stopes No. 6, in the back of the adit, west of Taylor's engine-shaft, is 2 ft. wide, worth ¾ ton per fathom.—Mill Lode: The lode in the 18, driving east of the cross-cut, is 1 ft. wide, worth ½ ton per fm. The lode in the rise above the 18, west of the cross-cut, is ½ ft. wide, worth 1 ton per fm.—House Lode: The lode in rise above the 10, against Pisco's winze, is small and poor. The ground in the 20 cross-cut, driving south of Oak shaft, towards the House lode, is rather hard. The lode in the adit level, driving west of the carga, is 8 in. wide, composed of an earthy substance and irony quartz, embeded in shale killas. The lode in the costeen pits, on the eastern hill, east of Pinto's shaft, is producing quartz and a little gossan.—Carvalhal Mine: The lode in the new adit, driving east of the cross-course, is 9 in. wide, composed of mundic. The lode in the adit level, driving west on Alhao's lode, is 6 ft. wide, composed of quartz, iron, mundic, mica, and felspar.

PONTGIBAUD MINES.—Capt. Richards, Sept. 4: Roure: The winze from the 80 to the 100 metre level has been holed, and the 100 metre level resumed south of St. Mary's shaft, on the St. George lode, and north on the No. 3 lode; the holing of this winze has given good ventilation to the bottom level, and we hope to lay open that level rapidly. The 40 metre level, south of St. Peter's shaft, on the Emily lode, is still in good ore ground, producing 3 tons of ore per fm. The 20 metre level, south of Agnes' shaft, is still in a good lode; the part carried in the end is worth 3 tons of ore per fm., but we find, by a new stope commenced since my last, that a valuable part of the lode has been left standing on the side, being too wide to carry in an ordinary level. The same level south is also looking well, and produces 3 tons of ore per fm.; in this level, also, a part of the lode is not being carried in the end. The deep adit has been holed to the winze sunk from the stollen, and that fine piece of ground made available for stoping. The lode in this level is worth from 2½ to 3 tons of ore per fm. We have now stoping on tutwork in this mine 40 men, and on tribute 28; these, with the ore from the levels, will give us higher returns than we have yet had from this mine, the work being of a richer quality.—Rosier: There has been nothing met with in the adit level, driving north of John's shaft, since last report; we are still driving through easy ground; present price for driving and tramming 18 francs per metre. The tribute pitches in this mine are not yielding quite as much ore as formerly, but no doubt will now increase, as there is daily enquiry after underground work.—Pranal: The 30 metre level has improved in appearance, being about 18 in. wide, saving work, and kindly. The 50 metre level south, on the Felix lode, is still in ore ground; the present end of level is worth ¾ ton of ore per fm.; the same level, south from Bontoux's shaft, on the Armand lode, is poor at present, but will soon reach the point over which a good run of ore was driven through in the 30 metre level. We have now employed in this mine, stoping on tutwork, 37 men, and on tribute 31; these, with the returns from the levels, are giving us about the usual quantity of ore stuff.—Barbecot: The 20 metre level, north of Leontine's shaft, has been resumed on a side lode discovered by tributers; where cut it looks very kindly, and produces 1½ ton of ore per fm.; if this lode continues to open out as it looks at present, it will assist in the returns from this mine.—Miocbe: Taylor's engine-shaft is now down 18 metres below the 40 metre level. The 40 metre level north, on the western part of No. 3 lode, is looking promising, and producing a little ore; the same level south of shaft, on the eastern part of No. 3 lode, is turning out a little ore, and promises a further improvement shortly. The 20 metre level west, on Nosky's lode, is laying open tribute ground, worth on an average ½ ton of ore per fm. We have 24 men stoping on tutwork, and 8 men on tribute; these together have given us more ore stuff than we have had water to return for the last two months. We have still to complain of the great want of water, and in some parts of the mines of the lack of surface hands; but, notwithstanding, in the past month we managed to dress 220 tons of ore, and hope to exceed that quantity this month, if we have hands and water.

The PEEL RIVER LAND AND MINERAL COMPANY have despatches dated July 10. The general superintendent had concluded an agreement for the purchase of 35,000 sheep, including the lease of the squatting properties of Ellangowan and Tooloom, together with horses, cattle, &c., thereon, for the sum of 33,500*l*. The new quartz vein which had been opened out had yielded to the discoverers in all 320 ozs. of gold; but although several shafts, 20 and 30 ft. deep, had been sunk into the vein in the claims adjoining, no one else had met with any success.

The DUN MOUNTAIN COMPANY have advices from their mining engineer, dated Nelson, June 22, stating:—"In sinking the shaft to prove the chrome lode, they have gone through a stratum of white porphyry of 2 ft. thickness, below which a vein of gossan with stones of copper ore was met with and sunk through; the vein was from 6 to 10 in. in width, underlaying 3 ft. in a fm., so that the bottom of the shaft is several feet below the vein. A cross-cut has been set to commence at the bottom of the shaft towards this vein, which will be cut at 10 ft. from the shaft. The ground is soft greenstone, and a good deal of water is oozing out. The adit to prove the chrome lode has been driven 35 fms., and next month we expect to reach the chrome lode. I shall report next mail about the copper vein."

The PORT PHILLIP AND COLONIAL MINING COMPANY have advices from their resident director, dated Melbourne, July 14. The operations at Clunes had been going on very well; during June 1405 tons of quartz were crushed against 1098 tons the previous month. The yield of gold was 2136 ozs. 7 dwts.; the cost of crushing averaged 1*l*. 8*s*. 9*d*. per ton for the month. The result of the six months' working showed 7055 tons quartz crushed; amount received for crushing the same, 18,240*l*. 4*s*. 7*d*.; the expenditure, 11,370*l*. 14*s*. 3*d*.; profit, 6869*l*. 10*s*. 4*d*. The machinery has been in full work for about six weeks, and showed an average of about 350 tons of quartz crushed per week, and when the 20-head battery was thoroughly repaired, its efficiency would be much increased. A further remittance amounting to 1500*l*. has been received on account of dividend. The quantity of gold melted during the month of June amounted to 38,376 ozs., and during the six months to 234,970 ozs., and showed a profit of 637*l*. 13*s*. 3*d*. The Clunes Mining Company have divided during the twelve months 17,600*l*. in the shape of dividends, or 160*l*. per share, in addition to expending 6000*l*. in extra labour and materials.

The ENGLISH AND AUSTRALIAN COPPER COMPANY have received advices dated July 10.—The manager states that he was preparing his accounts, and that the stock account and valuation of the whole of the company's property would be sent forward in due time for the next meeting of shareholders. Owing to the usual stock taking, the furnaces were not working, but would recommence in a few days. The make of copper for the year ending June 30 exceeded 1900 tons, and a shipment of about 70 tons was being made to this country. The ore shipments were proceeding as usual.

BON ACCORD MINING COMPANY—July 3: There are indications that water will probably have to be encountered as an obstacle to progress earlier than was anticipated. The sinkings and drivings have been progressing satisfactorily. Looking at the ground opened at the 15, on the course of the lode at Elder's shaft, and the good indications at the 21, Capt. Jeffrey had no hesitation in saying that they were just on the back of a large deposit of ore. This shaft is now down to the level of the water, and a horse-whim has been prepared to keep it in fork until the steam-engine can be got to work, for which every preparation is making.

WILDBERG MINING COMPANY.—Z. Walls, Sept. 4: The men who have taken the different bargains are working satisfactorily, and I hope by the end of the month we shall be able to return the quantity of ore promised. We shall sample on Monday next the ore taken out of the mine in August, which is computed at 200 tons.—Mr. Goundry reports that the smelting operations are progressing satisfactorily.

WORTHING MINING COMPANY.—July 4: Bremer Mine: We have driven the 12 fm. level, north of Watton's shaft, on the course of the lode during the month 4 fms. 1 ft. 8 in., ground 9*l*. per fm., lode from 1 to 1½ ft. wide, black sulphurets, malleable copper with quartz; with cross heads or rather branches of the richest ore in the stratum or country, there being on survey day about 8 ft. of the lode to take down. In resuming the end after setting the same at 10*l*. per fm. for the month, by taking down the last-mentioned 8 ft. of standing lode, and driving to cut through the before-mentioned cross-heads or branches at the point falling into the main lode, a rich course of malleable copper, black oxide and sulphurets mixed with gossan and quartz, and in places more or less with iron pyrites, was discovered, from 2 to 3 ft. wide; the last two days breaking in driving the end alone was drawn to surface on Saturday last, and such work for malleable copper and rich copper ores I never saw drawn before from any mine. At a rough estimate I compute its value to be 100*l*. From this I have no doubt but that the ground now standing between this and Hocking's shaft will prove to be more valuable than any previous anticipations through good prospects could have led us to believe. There is a good course of black ore in Hocking's shaft, but the water being quick prevented our sinking to the depth required to meet the 12. We have driven south of Hocking's 2½ fms., ground 8*l*. per fm.; lode 2 ft. wide, of gossan, malleable copper, and black and grey sulphurets, which constitute a rich and paying lode. The end north is driven 5 ft. only, set within a week to six men, lode 3 ft. wide, in places rich for malleable, other places stones of rich grey and other copper ore, mixed with more quartz and gossan of the most promising kind, and likely to extend as far as the north of Hocking's. This will enable us to see whether Hocking's be the place for our new engine, or whether it should go further north. The quantity of ore raised during the month by the tributers is about 9½ tons, say, 12 per cent. produce. Judging from present and advanced prospects, can safely say that dividends are at hand; and I feel great pleasure to find that former reports we now verify by facts, and that our next will bear testimony to the same.—Extract of letter since received, dated July 8, 1858:—I herewith forward per this post a sample of malleable copper and ore, as broken from the lode in the 12. Since Saturday we have drawn 61 kibbles of rich work from the same level; lode 2½ ft. wide, more spare for breaking; such changes the lode is subject to. The end driving south from Hocking's is looking well. In the same level, north from Hocking's, a splice has taken place, and will now make from the western side. Should you have a sample of this assayed I should like to know the result,—from 70 to 80.

Mining Correspondence.

BRITISH MINES.

ABBEY CONSOLS.—J. Trewin, Sept. 6: I cannot speak of any change having taken place in the eastern shaft since my last. The stopes in the back of the 10, west of the eastern shaft, are much the same, worth 12 cwts. per fathom. The lode in the winze in the bottom of the adit, west of the said shaft, is worth 5 cwts. of lead per fathom. We have a fresh supply of water, and have resumed sinking the engine-shaft. The stopes in the back of the adit, west of engine-shaft, are yielding 6 cwts. of lead per fm. We are getting away the stuff from the 10 fm. level, at the engine-shaft, as fast as possible, and the driving, stoping, &c., at this point will be resumed in a day or two.

ALFRED CONSOLS.—T. Trelease, S. Uren, Sept. 8: Field's engine-shaft is now sunk about 8 fms. below the 160; the lode is 5 ft. wide, much of the same character as for some time past. No lode is as yet intersected in the 160 cross-cut north. The north lode in the 150, west of the flookan, is 8 in. wide, spotted with ore. The main lode in the 140, east of the flookan, is still large and promising, containing a little ore. In driving the cross-cut south, at the 130, we have intersected a branch about 6 in. wide, producing good stones of ore; here we expect shortly to see the north lode. The main lode in Davey's engine-shaft, sinking below the 120, is without alterstion since our last report. The lode in the 120, east of said shaft, is at present unproductive. The lode in the 110, east of the above shaft, is worth 7*l.* per fathom. The south branch, in No. 1 winze, sinking below the 100, is worth 20*l.* per fathom. The branch in the 100, east of the above shaft, is 2 ft. wide, composed of capel and spar, with spots of ore. The new north lode in the 70, east of the flookan, is at present split in two branches, composed principally of mundic, spotted with ore. No other change to notice.

ANGARRACK CONSOLS.—Jas. Barratt, Sept. 7: At Cox's engine-shaft we have a change in the strata coming in from the north-west, and dipping south-east at an angle of 53°; the ground hitherto has been a blue clay-slate, with occasional veins of hard quartz, the new layer is a white clay-slate, which is more congenial for mineral, and I have no doubt the lode, which will be intersected in 3 fms. more sinking, will be found productive; this shaft is sunk 2 fms. 3 ft. below the 12. The 12 cross-cut being driven north from Cox's shaft towards Eaton's lode is in 7 fms. 5 ft. 2 in.; this end is in hard ground. Our setting took place on the 4th inst., when Cox's shaft was taken to sink by 6 men, at 9*l.* 10s. per fm., and the cross-cut by 3 men and 3 boys, at 7*l.* 10s. per fm.

BALLYMONEEN.—W. Barkla, Sept. 4: We are progressing favourably in driving the 25 east, and the cross-cut south in the same level; the latter is in mineralised ground; both have been driven 4 ft. The adit level east is still producing good stones of sulphur; driven since last report, 3 ft.: total, 39 fms. 2 ft. We have men busily engaged in clearing up some old workings, the bottom of which I hope to be able to see in a few days.

BALLYVIRGIN.—D. Macdonald, R. Pellew, Sept. 2: We have cut into the eastern side of the north end for 2 feet, and have got a very promising lode of copper and lead; as the lode is of a vughy nature we cannot value it till we have seen the eastern wall. No. 2 stope, formerly No. 3 stope, is worth 1¼ ton of lead, and 10 cwts. of copper per fathom. No. 3 stope is behind the former stope, and on the east footwall, and is worth fully 2½ tons of copper and 15 cwts. of lead per fm. The south stope is worth 1½ tons of copper and 5 tons of mundic per fm. We have set four men to sink on Daffy's shaft, 7 ft. long and 5 ft. wide; the lode is worth 10 cwts. of lead, with stones of copper, and ⅛ ton of mundic per fm. We have put 1¼ tons of lead, 1 ton of copper, and 2 tons of mundic to pile since last report, and prepared for the crusher 2 tons of lead. We have chartered the *Mariner* for Garston, and intend loading her with mundic and copper ore.

BARF.—W. Mitchell, Sept. 8: We are driving the end of Laidlaw's level, as well as the cross-cut east; the ground as last reported. In the north mine we have completed the adit level 75 fms., which will come under the shaft; the lode in the bottom contains good lead, with every prospect of an improvement.

BEDFORD UNITED.—J. Phillips, Sept. 7: No alteration has taken place worthy of notice at any of the different points of operation since the report for the general meeting.

BODCOL.—F. Evans, Sept. 4: Evans's shaft dropped to-day 55 ft.; ground favourable for sinking.

BOILING WELL.—J. Delbridge, Sept. 4: The lode in the engine-shaft is 5 ft. wide, yielding lead and blende, not to value. In the 60 west the lode is 5 feet wide, kindly lode, not to value. In the 60 east the lode is large, with stones of ore. In the 50 east the lode is 15 in. wide, tribute ground. In the 40, east of Austin's, good tribute ground. In the 30 fathom level, west of Syrett's, copper tribute ground. In the 20 fathom level, east of ditto, the lode is 15 inches wide, stones of lead; most of the ends are a little improved. The rise in back of the 20, tribute ground. The stopes in back of the 50, tribute ground. The tribute much as last week. We purpose sampling 20 tons of lead ores on Saturday next; tenders for samples shall be forwarded to the office. We have put Austin's engine to work this day in first-rate style; it works well, and lifted the water to pump-head as is usual. We hope in the coming week to clear up the mine of ore and deads, and resume the ends with all speed; also to sink Austin's shaft, by eight men, towards the 50.

BRONFLOYD.—M. Barbary, Sept. 8: The lode in the various stopes and drivages is much the same in appearance and character as when last reported on, and will on an average yield full ⅛ ton of ore per fathom. As yet we have not intersected the south or caunter lode in the 17 cross-cut, but expect to do so very shortly. The new adit level south is progressing favourably, also the dressing and surface operations.

BRYNTAIL.—J. Roach, Sept. 9: The 10 east, which is from 3½ to 4 ft. wide, driving in the middle of the lode, has gradually improved during the past week; it is still producing fine stones of solid ore, and a good mixture of the latter throughout the level, accompanied by a combination of iron and sulphur, spots of copper ore, a small quantity of lime, and barytes. I estimate the present produce at from 10 to 12 cwts. per fm. That part of the lode standing north and south of the level has not yet been cut into. This level is being driven into virgin ground; therefore, from present indications, I fully expect further development of the lode will result in large yields of ore. In the 25 cross-cut we met with a stiff bar of ground this week, which has retarded the usual progress, but I think we are nearly through it. The ground in the forebreast appears changing.

BUCKLAND CONSOLS.—Capt. Carpenter, Sept. 2: The lode sinking on at the main shaft is very much improved in size, and is nearly 3 feet wide, with well-defined walls, in a blue clay-slate, very congenial for copper ore. The lode is in a more settled state, composed of quartz, prian, gossan of a fine description, impregnated with mundic and spots of yellow copper ore, and being near a large and very fine cross-course which traverses the locality, I think I shall be able ere long to report a good lode.

BULLER AND BASSET UNITED.—G. Reynolds, Sept. 8: The shaftmen are still sinking with all speed. The lode in the shaft is about 4 ft. wide, and of a most promising character. We have this day broken good stones of ore from the bottom of the shaft; the lode seems to be making a change in depth, and the stratum is not so hard as it has been. All other things are without change.

BWLCH CONSOLS.—N. Bray, Sept. 4: Since my last communication our prospects are looking a little more cheerful; during the last few days we have had heavy showers, but not quite sufficient for pumping. Last night the rain descended without intermission, giving us a full supply for pumping and crushing, and I presume, from the quantity of water already collected in the ponds, we shall have sufficient to carry us over the season. Every exertion and attention will be paid to get the mine drained as soon as possible; but our pumping apparatus is so exceedingly small that it will take several days before we shall be in a position to resume working in the bottom levels and stopes, which at present are the principal points for keeping up our returns. I regret to say the lode in the 60 end, driving west from Pwllithrynaid shaft, is still unproductive, but we may reasonably expect an improvement shortly, as we are nearly under the eastern part of the shoot of ore gone down in the 50. Not much alteration in the stopes in back of the 40 since my last report.—Old Mine: The lode in the 40 end, driving east, is 2 feet wide, composed of quartz, killas, and spots of lead ore; ground favourable for exploring. The stope, in the back of this level is holed up to the old workings. The new lift of pumps set down a few days ago work well; but yesterday one of the old 6-in. wood rods, from their long standing, broke, which will have to be replaced by a new one; this will be done without delay. We shall resume dressing in the course of a few days.

BWLCHSTELLAN.—N. Bray, Sept. 6: The men are progressing favourably with the sinking of the shaft by the side of the lode below the 13; the ground is of a beautiful light colour, and compact clay-slate formation, similar to that of the celebrated East Daren and the once famed Goginan Mine; and it is the opinion of almost every mining agent in the district that after you get fairly below the great gossan lode you will ultimately have a lasting and productive mine.

CALSTOCK CONSOLS.—W. B. Collom, Sept. 9: Since the 42-in. cylinder engine went to work, on Aug. 28, the necessary alterations have been making to the other engine, which will now be used entirely for drawing away the stuff. In consequence of these alterations, and the bursting of the H-piece of the plunger-lift, there has been nothing done in the bottom levels for the last fortnight; the water is now in fork, and we have commenced to-day drawing away the stuff, and both engines are working remarkably well. The mine is again in full operation, and the shaftmen will commence taking down the lode in the shaft to-morrow, when we anticipate a still greater improvement. The ore broken from the lode in the winze and in the 24, which was sampled August 27, yielded, on an average for the two months, 9 tons of ore per fm. The lode in the 24 end is not so large or solid with ore as it has been, but we anticipate an improvement again. The winze is holed to the 24, and a pare of men will commence stoping from the end.

CALSTOCK UNITED.—Captain Cooke, Sept. 9: In the past week the men in the 28 end east have been opening the ground on the north side of the level, and have intersected the tin lode, cut into it 4 feet, but as yet no north wall; the lode is exceedingly hard, and at this point composed of capels, peach, and a little tin; some part of the lode highly mineralised with mundic and black ore, but not to value. The lode appears to be taking a parallel direction with the silver lode about 2 feet apart; this end certainly ought to be continued to eastern cross-course, the ground being favourable for driving.

CAMBORNE CONSOLS.—W. Roberts, Sept. 7: The following bargains were set on Friday last:—The 50 cross-cut to drive north, by four men, at 11*l.* per fm. A winze to sink under the 20, by four men, at 8*l.* per fm.; the lode is 1 ft. wide, with occasional stones of ore. The 10 west, by four men, at 5*l.* per fm.; lode small. The adit to drive north, by two men, at 2*l.* 5s. per fm. Some good ores are being broken by the tributers in the back of the 20 fm. level.

CARADON CONSOLS.—William Rich, Sept. 7: The ground at Thomasine's shaft is favourable for sinking, and the cross-course still very regular and well defined. We are bringing in a shallow adit to carry off surface water from the collar of this shaft. The masonry for bob-stand is nearly completed, and the refixing of flat-rods proceeded with.

CARDIGAN CONSOLS.—James Sanders, Sept. 6: The 10 west is still yielding stones of ore occasionally, with the appearance of an early improvement; the winze sinking below this level is not quite as good as last reported, yielding at present about 3 cwts. of per fathom. I expect this winze will be communicated with the 20 in about a fortnight, after which the level will be well ventilated, and the driving of the 20 west will be resumed as soon as possible. The 10 east is much the same as for some time past, yielding stones of ore occasionally, but not to value; the winze sinking below this level is still unproductive. The cross-cut north from the 10, west of shaft, is in a very hard part of the lode, and no ore to value as yet. Since my last report a cross-cut has been set to drive south from the 10, 70 fathoms west of the engine-shaft, by four men, at 6*l.* 6s. per fathom; the lode is not yet met with at this point. The winze sinking below the adit has been communicated with the 10, near a branch of ore driven through, worth about 10 cwts. per fm., where I have put two men to stope a few fathoms to ascertain if it do hold up above the back of the level or not. We have at present sufficient water for all purposes, and expect to sample on Monday next from 18 tons to 20 tons of lead ore.

CARVATH UNITED.—R. Hancock, Sept. 6: We have an improvement in the 50 end, west of shaft; the lode is 2 feet wide, producing good work. The stopes in the back of this level are just as last reported. The 40 end west is still producing saving work, and at present kindly for driving. The 40 and 50 ends are driving on the main lode, west of the engine-shaft, where all of our operations have been confined ever since I have been on the mine; also the driving and stoping have been on this lode, except the clearing of the east adit level, and a few fathoms driving west from the east shaft, and the shaft sunk about 16 fathoms, and the cross-cut driven north in the 20 fm. level; I think this cross-cut should be driven to cut the north lodes; they may be the best lodes for what we know. I shall recommend the present engine-shaft to be sunk with all possible speed, to prove the tin ground going down below the 50; it will take six or seven men to sink the shaft 10 fathoms, cut a plat in the 60, and drive about 20 fms. to get under the run of tin ground gone down below the 50, which will cost about six months to do, and drive on the 40 and 50 ends at the same time, to prove the western ground, where nothing has been done yet: all in virgin ground for a great length on the course of the lode. I shall not prove the mine before this is done; also on the eastern part of the sett there is scarcely anything done to be compared with mining generally. It is a large piece of ground yet untried. The machinery is in good order, and working well, and all the surface just the same at present. To sink 10 fms. at the engine-shaft we should want a lift of pumps.

CARVANNALL.—W. Roberts, Sept. 7: The following bargains were set on Wednesday, the 1st inst.:—The 130 to drive west, by six men, at 5*l.* 10s. per fm.; lode 3 feet wide, producing crystallised iron and prian, with occasional stones of ore. A winze to sink under the 118, by four men, at 3*l.* 10s. per fm.; lode 1½ foot wide, good tribute ground. The 118 west, by four men; lode 1 foot wide, chiefly iron; driving at 3*l.* 5s. per fm. The 86 west, by four men, at 8*l.* per. fm.; lode small, and the ground much harder than usual. The 76 west, by four men, at 4*l.* per fm.; lode about 1 foot wide, unproductive. The 56 to drive west, by two men, at 2*l.* 10s. per fm.; lode small.

CASTELL.—F. Evans, Sept. 4: The lode driven through in the 10 cross-cut south has been principally composed of spar, with a little blende and lead; we have commenced to drive east on its course.

CATHERINE AND JANE CONSOLS.—R. Harry: The lode in the deep adit end is 1 ft. wide, producing 3 cwts. of ore per fm., and looking more promising than it has for some time past. During the past week we have cut into the north side of this level about 3 ft., and intersected a branch 6 in. wide, producing a little ore, but nothing to valne. The stopes north-west of No. 4 winze are worth 12 cwts. of ore per fm. The lode in the stopes north-west of the rise continues to yield 12 cwts. per fathom. The stopes south-east of No. 3 winze are not so productive, worth at present 5 cwts. of ore per fm. The branch in the eastern end is looking very well, and will now produce 22 cwts. of ore per fm. The lode in the middle adit end is 1 ft. wide, yielding 3 cwts. of ore per fathom, of good quality; ground favourable for driving. We shall sample 10 tons of fair quality ore to-day, which shall be sent to Holywell at the earliest opportunity.

COLLACOMBE.—S. Mitchell, Sept. 7: During the last week the rise in the back of the 84, west of Morris's shaft, has been put up 2 fathoms; the lode is composed of capel, quartz, prian, and good copper ore. It will occupy the men until the end of this week to take down the lode in the rises in the back of the 72 and 40 west, and make the same secure preparatory to putting a footway in each, &c., when the driving of these levels will be again resumed. There is nothing new to notice in any other part.

COLLEGE.—A. Braithwaite, T. Murray, Sept. 6: The stopes north of the run shaft continue the same; the lode is strong, mixed with lead. The pitch in the sole of the 10, south of the engine-shaft, on the red lode, is much the same as last reported; there are strings of lead through the ground, but nothing regular. The pitch in the 20 looks kindly; a good lode, with small branches of lead, the ground very tender, though the branches are small, and every indication of its improving. We have in store 3 tons 5 cwts. of lead, and we hope by the end of the month to add another 4 tons.

CROWNDALE.—Jas. Richards, Sept. 9: In the shallow adit level north the ground continues easy for progress. The lode in the different pitches throughout the mine is worth 4, 2, and 3 tons of ore per fathom.

CWM ERFIN.—Sept. 7: The lode in the 69, going east from the drawing-shaft, is 2½ ft. wide, composed of clay-slate, quartz, and spots of copper and lead ore, and looking a little more promising than when last reported. The lode in the 57, going east from the cross-cut, is 2 ft. wide, composed of clay-slate, quartz, and lead ore, yielding of the latter 8 to 10 cwts. per fathom. The lode in the stopes over the back of this level, about 30 fms. east of the cross-cut, is on an average 4 feet wide, yielding 12 cwts. of lead ore per fm. The lode in the 45, proceeding east from the cross-cut, is 3 feet wide, composed of a dark clay-slate, spots of copper, blende, and lead ore, yielding of the latter ¼ ton per fm. The lode in the stopes over the back of this level, about 30 fms. east of the cross-cut, is from 3 to 4 ft. wide, yielding from 8 to 10 cwts. of lead ore per fm. The lode in the 32, east of the cross-cut, has considerably improved during the last few days, being at this time all the breadth of the end, and composed of clay-slate, carbonate of lime, and copper and lead ore, yielding of the latter 1¼ ton per fm. The lode in the stopes over the back of this level, 7 fms. east of the cross-cut, is 3½ ft. wide, yielding 1 ton of lead ore per fm.; this stope will be taken away to the bottom of the 20 in about a week from this time, when those men will take up a new stope from the back of the 32. The lode in the 20, going east from the cross-cut, is 3 feet wide, composed of clay-slate, carbonate of lime, and copper and lead ore, yielding of the latter about 12 cwts. per fathom. The lode in the stopes over the back of the level is 4 ft. wide, yielding 15 cwts. of lead ore per fm. The 10 cross-cut south begins to show symptoms of our nearing the lode; the ground has got a little more easy for exploring, and much water issuing from the same. We sample this day 50 tons of good quality ore, the produce for August month.

DEVON AND CORNWALL UNITED.—T. Neill, Sept. 7: There is no change to notice in the 40. In the cross-cut south at Bastard's level there is more water issuing from the end, from which indication I think we are getting near the lode. The stope in the back of this level is turning out about the same quantity of ore as for some time past. We have commenced sinking the new shaft at William and Mary, and no time will be lost in pushing it down. There is nothing new in any other part of the mine.

DEVON BURRA BURRA.—Wm. Clemo, Sept. 8: I was underground yesterday, and was glad to find that the ground in the 40 east has become easier for driving, and we think the end is nearly through the cross-course. In the 22, north of White's shaft, the part of the lode carried is 4 ft. wide, composed of soft gossan, quartz, and unusually fine specimens of copper ore. The engine and all its connections are in good working order.

— J. Lord, Sept. 9: I find to-day that we are through the cross-course; the end is showing more killas, and not so much water as in the present end. My advice is to push this end as fast as possible by eight men, and then cross-cut north and south, also to put two more men in the drivage at White's shaft; this end is looking better to-day than I have seen it since we commenced driving; there are good spots and stones of ore 18 in. wide, which appear to be thrown in from an east and west lode. I have no doubt but that it is from the lode we have discovered 30 fathoms north of White's shaft. I believe this to be our north caunting lode; by driving at both shafts we shall soon ascertain what we have there. I will send you a report to-morrow.

DEVON GREAT ELIZABETH.—W. Williams, W. Goyen, Sept. 8: The wheel-pit will nearly be completed by the end of this week: the lobby to take off the water from the same is finished. We shall commence collaring up, or rather timbering, the engine-shaft to-morrow or the day after; the ground is rather favourable for sinking, but the water is increasing as we sink. The carpenter and sawyers are busily engaged preparing the timbers necessary for the launders; the axle and most of the other parts belonging to the wheel are on the mine, so that the engineers may commence their work within a few days of the wheel-pit being finished.

DEVON WHEAL BULLER.—F. Bennetts, jun., Sept. 8: There is no change in the appearance of the lodes in the different levels of this mine to report since my last. The lode in the stope in the back of the 32 east has not been taken down. The lode in the winze sinking in the bottom of the 32, west of engine-shaft, has been changeable, but on an average will yield about 1 ton of ore per fm. The lode in the rise in the back of the 44, under the winze, is large and kindly, producing good saving work. We have not as yet intersected any lode or branch on the cross-cut driving south from the engine-shaft.

EAGLEBROOK.—H. Tyack: We have commenced sinking a winze from the adit level to the 10 fm. level, about 35 fms. west of the engine-shaft; it is now sunk about 2 fathoms, and will speedily be finished, as the ground is favourable. Adjoining this winze is some good lead ground going down to, and visible in, the 10, and when the winze is communicated this will afford a good stope between the two levels. In the 10 fm. level the end is now stopped till the winze is sunk to this level from adit, and the men have commenced a stope on the northern part of the lode, about 20 fathoms west of the engine-shaft; the lode here promises well, both for lead and copper, it is very wide, and the ore accompanies a strong feeder of black gossan, which is going down in depth, and which we conider highly promising. There is a second stope above this ground, 3 fathoms higher, which is also good, and that this ground we are sure continues so upwards to the adit level. This is the best discovery we have made on the mine for some time. In the large stope underhand of the north lode, in the 10 fm. level, there is still excellent ore going down, and we now hope to reach this ground shortly by the cross-cut to the north ground. The 20 is now clear of water, and the cross-cut advanced 4 fms. 3 feet. We have sampled to-day 20 tons of ore, of good quality. There are about 12 tons of fine copper ore on the floors, and as we have now a good supply of water, we hope it will not be very long before we make another sampling.

EAST ALFRED CONSOLS.—Henry Skewes, Sept. 8: Painter's shaft is being sunk with all possible speed. Having cut through the cross-course in the 15, on the south lode, western end, the lode is from 1 to 1½ ft. wide, with a kindly appearance, producing blende, spar, and copper ore. In the western end, in the 15, on north lode, the lode is 2 ft. wide, with a kindly appearance, producing blende, spar, and copper, with a quantity of water issuing from it. The eastern end, on ditto, is without any alteration. The winze sinking under the adit, on the south lode, produces 1½ ton of blende per fathom. Ditto, on north lode, is worth about 2*l.* 10s. per fm. for blende and copper. The stopes throughout the mine are not looking so well as they have for some time past.

EAST CARN BREA.—T. Glanville, Sept. 8: In the 14, east of the engine-shaft, the lode is 2 feet wide, composed of gossan and copper ore. The other parts of the mine are without alteration.

EAST DAREN.—Sept. 7: In the 80, east of Taylor's shaft, and west of winze, the lode is 3 ft. wide, composed of clay-slate, spar, and lead ore, and improved since I wrote last, yielding 2 tons of lead ore per fm. All other bargains are much the same as when last reported. The dressing and machinery is in full operation, with a full supply of water. We have this day sampled 105 tons of lead ore.

EAST GUNNIS LAKE AND SOUTH BEDFORD CONSOLS.—J. Phillips, Sept. 7: There is no change to notice in any part of the mine since last report.

EAST PROVIDENCE.—W. Hollow, T. Uren, Sept. 7: Harvey's shaft is cut down 11 fms. 3 ft. below surface, 8 ft. more will reach the bottom of the old workings. We set on Saturday last, to six men, the above 8 feet, to bring down, cut a plat, fix lifts, bearers, cistern, &c., for the sum of 28*l.*: this work will be completed in about four weeks. Poole's shaft is sunk 8 fms. 3 feet below the adit level; here we have set to six men a contract to sink 9 feet, cut a plat and brow, for 28*l.* The lode in this shaft is not quite so large as it was last week; it is producing a little copper ore, but at present not much to value. The eastern adit is driving west from Poole's shaft, by two men, at 30s. per fathom. The lode is 15 in. wide, of a promising character.

EAST ROSEWARNE.—J. Delbridge, F. James, Sept. 4: In the 43 cross-cut south the ground is hard for driving, and is very wet, but looks kindly to yield copper, as we find branches containing it. In the 33 west the lode is large, but unproductive. In the 22 east, on north lode, the lode is from 6 to 10 in. wide, yielding some rich copper ore, about ¾ ton per fathom; the lode in this end has taken a different underlie from the level above, which seems to be the top of a very orey lode; also the bearing is 10° south of east, and 10° north of west. In the winze sinking below the 12, on the same lode, the lode is 9 in. wide, with a good branch of ore. The lode in this winze has changed its underlie from north to south, and we have since met with a good orey lode for the width. We find Hallett's shaft should taken the lode about this point (the 12), but as the lode has changed from a north to a south underlie, we shall not meet with it before we sink as deep as the 22, from present appearance. The 43 cross-cut is set to drive by six men, at 15*l.* per fathom. The 33 west, set to drive by two men, at 3*l.* 10s. The 22 east, set to drive by six men, at 8*l.* per fathom. The 12 winze, set to drive by four men, at 5*l.* per fathom. Hallett's shaft, set to drive by six men, at 9*l.* per fathom. Our tribute is without change to notice.

EAST TAMAR CONSOLS.—G. E. Tremayne, Sept. 7: The lode at the engine-shaft still continues worth 15 cwts. of lead per fm., and very promising for further improvement. In the 40 south the lode is 3 feet wide, principally composed of fluor-spar and lead, of the latter will yield about 9 cwts. per fm. No alteration in any other part.

EAST WHEAL RUSSELL.—John Goldsworthy, Sept. 9: The ground in the 88 is a little more spare for driving than what it has been; the lode is of a promising character. The ground at Homersham's shaft is much the same as when last reported. The ground in the 66 is favourable for driving; the lode is not looking so promising as when last reported. The clearing of the 45, east of the Tunnel level, is progressing favourably. The tribute pitches are much the same as they have been for the last three or four weeks.

FRANK MILLS.—J. P. Nicholls, J. Cornish, Sept. 8: The 84 north, on the eastern lode, is still yielding from 8 to 9 cwts. of lead ore per fathom; ground of the same character as it has been for some time past. The 84 south, on the same lode, is without any material alteration since last report. The 84 north, on the western lode, is producing saving work; lode 2 feet wide. The stope in the back of this level, on same lode, continues to yield about ¼ ton of lead ore per fathom. We are cross-cutting west from the 72 south, on eastern lode, but have not yet reached any lode. The 72 north, on the western lode, is at present poor. The 60 south, on eastern lode, is still in disordered ground. The cross-cut east, just behind the latter end, is not yet through all of the lode, but is still intersecting orey branches. All other tutwork bargains are without alteration, and the tribute pitches yielding a very fair quantity of ore, whilst our surface operations are progressing much as usual.

GAWTON COPPER.—J. Gill, Sept. 8: There is no alteration in any part of the mine to notice since last week. We are progressing as fast as possible with the dressings for the next sampling.

GELLIHEIRON.—N. Bray, Sept. 6: To day the men will commence taking about the crushing mill, and after I finish writing I shall go over to make the necessary drawings, &c., so that no time shall be lost in getting it to work again as soon as possible. No alteration in the underground department to notice since last reported on.

GERNICK.—J. Barratt, Sept. 7: There is a perceptible change in the ground for the better in the 36 end, being driven east from flat-rod shaft, on Gernick lode; the lode is just the same as when last reported.

GREAT HEWAS UNITED.—J. Webb, Sept. 9: The 96 fm. level is not producing much tin as yet; we intend after driving 6 ft. further to put up a rise on the lode. The 76, driving west, is producing stones of tin. The 66 west is 1 ft. wide, good for tin. The 56 east is yielding good tinstuff. The 36 east is in an unsettled piece of ground. The stopes are producing tin equal to what they have been doing for some months past.

GREAT ONSLOW CONSOLS.—G. Rickard, Sept. 9: The lode in the whim-shaft contains more peach. In the 87 west the end is being driven by the side of the lode; the ground is at present hard. In the 107 west the lode is large and spotted with ore. In the 107 east the ground by the side of the lode has very much changed in its nature for the better; the lode, which appears to have been submitted to what is called a "squeeze," is again recovering its size.

GREAT SOUTH TOLGUS.—John Daw, Sept. 8: The sumpmen at Lyle's shaft are employed in cutting plat at the 90, and putting in the skip-road. We shall commence driving the 90 east and west of Lyle's shaft next week. The lode in the 80 west is 2½ feet wide, producing 3 tons of copper ore per fathom. Other parts are much the same as last reported.

GREAT TREGUNE CONSOLS.—J. Spargo, Sept. 7: The small parcel of ore was sampled at Calstock a fortnight since, but it will not be sold until the regular day at Truro, then it will be weighed off. I shall know the produce in a day or two. The ore is light, but very good. I think it is something of the same quality we sampled last; I thought it would be more; but in dressing a small batch like this you can hardly calculate on the quantity. When we sample again we must have a larger parcel. In reference to the lode in Hobler's shaft, the ends in the 60 and 70 are both improving.

GREAT WHEAL ALFRED.—M. W. Michell, Wm. Arthur, Sept. 4: Copper-house shaft is sunk 2 fms. 5 ft. below the 190, where the lode is full 4 ft. wide, worth for the whole length from 80*l.* to 90*l.* per fm. The lode in the 190 east is 18 in. wide, producing a little yellow ore. The lode in the 190 west is 3½ ft. wide; 2 ft. of the north part is saving work. In the 180 west we are putting in tramroad and clearing out the adit; consequently nothing has been done in this end since our last report. We expect to complete it by Saturday next, when we shall resume driving. In the 160 we are cross-cutting north, to see if any more lode is standing. No change in the 148.

GREAT WHEAL BADDERN.—John Jenkin, Sept. 7: We have nothing new in our underground operations during the past week to communicate.

GREAT WHEAL BUSY.—F. Nancarrow, Sept. 4: In the engine-shaft the ground is harder for sinking; the lode has been smaller than usual, but is again opening, and is improved for tin, worth, for the whole length of the shaft, 32*l.* per fathom. The lode in the 100 east is improved in appearance, and is worth for tin and copper 15*l.* per fm. The lode in the rise under Offord's shaft is 3 ft. wide, worth for tin 25*l.* per fathom. The 90 east presents just the same appearance as last week. All the necessary ground has been cut in Rawling's shaft, and we expect to draw from bottom next week. In the 80 west the lode does not improve. The 50 cross-cut west is still very hard, but we continue the driving south, expecting soon to meet with the south wall. We have at length got the water for condensing through the shallow level; the new lift is working very well, and I think we shall have but very little more trouble with the back water. Eighteen men are engaged in cutting down the shaft at Reid's, the foundations are cleared out, the masons are at work, and nearly all the stone from the old engine-house carried. Our setting has gone off well to-day, and our prospects in the bottom of the mine are of a very cheering character, raising high expectations concerning the ground below the 100 fathom level.

GREAT WHEAL VOR.—T. Gill, Sept. 9: All the machinery throughout the mine is working well; we are drawing from the 273 with two skips. We have two tributemen and other labourers securing stopes below the 264, for the purpose of bringing them in course of operation as quick as possible. We hope to increase our returns shortly.—Wheal Metal: The 110, west of engine-shaft, on Metal lode, is disordered; the rise in the back of the 110, west of engine-shaft, on Metal lode, is 2 feet wide, worth 70*l.* per fm.

GWYDYR PARK CONSOLS.—H. Rawson, Sept. 9: In Cross Mawr level we have broken down the lode to-day, and it is looking much the same as when last reported on.

HARWOOD.—J. Race, Sept. 3: I am now quite certain that we have met with an east and west vein intersecting the No. 2 cross vein, south of the level. We are driving east in it, but have no check, or wall, on either side, so I cannot tell the width of it. We find good samples of ore in soft mineral soil, and it improves as we leave the cross vein; set to two men, at 36s. per fathom. Stope No. 2, in Rough Rigg vein, is set to two men, at 36s. per fathom, worth 8 cwts. of ore per fathom. The level is set as before, at 40s. per fathom. This ground is likely to prove harder than we expected.

— W. Vipond, Sept. 2: I have been at the Harwood Mines to-day. There is no death whatever about the new vein in the south end; it is apparently a strong promising east and west vein, yielding fine samples of ore. They have driven in it now 4 fathoms, and I strongly advised Capt. Race to set the men a bargain; the ground is easy for driving, and they will soon open a few fathoms. I consider it to be a most important discovery. The stope in the other vein is worth 6 or 8 cwts. of ore per fm. The level is not so easy as I expected to have seen it.

HAWKMOOR.—J. Richards, Sept. 6: In the 60, east of the shaft, the lode is large, and very regular on the footwall, and has a better appearance than for several fathoms driving. In the 40 east the lode is 3 ft. wide, carrying a good leader of ore on the south part, worth 2 tons of good quality ore per fm.—At West Hawkmoor, no change to notice in the underground department since my report of last week.

HINGSTON DOWN CONSOLS.—W. Richards, Sept. 8: There is no change to notice in the underground department since my report of last week.

HOLMBUSH.—N. Seccombe, Sept. 7: The lode in the 145 west, west of the cross-cut, has not yet been taken down, but cut into, and it will produce 2 tons of ore per fm. The stopes in the back of this level will yield from 1 to 2 tons of ore per fm. The stopes in the bottom of the 145, west of cross-course, will produce 1½ ton of ore per fm. In the 160, east of the diagonal, the lode in the end, east and west of the cross-cut south, has not been taken down this week, but from the appearance of the lode it will produce over 1 ton of ore per fm. in each end. In the 160, west of the great cross-cut south, another cross-course has been intersected, but the lode is not yet discovered. The stopes in the back of this level will produce 1 ton of ore per fm. The lode in the 145 west, on the flap-jack, is yielding a little ore, but not enough to value. The stopes in the back of this level have been producing from 1 to 2 tons of ore per fm., of inferior quality; a small slide has disordered the lode in the rise for the present. In the 132 south, on the leader lode, the lode in this end is producing abundance of fluor-spar, interspersed with lead ore and jack. The same remarks will also apply to the stopes in the back of this level.

HUCKWORTHY BRIDGE.—J. Key, Sept. 8: The lode in the shaft is full 6 feet wide, and is as good looking a lode as can be met with at the same depth, composed of capel, quartz, iron, mundic, and rich copper ore, with a branch of flookan on the north or foot-wall, impregnated with grey copper ore. I think before long that we shall have a change for the better. The water in the shaft is not sufficient to hinder the progress in sinking. I must say that the lode never presented such indications of improvement as at present. There has not much been done in the shaft for the last two or three weeks; the men have been engaged in other necessary work, but we are now resuming the sinking. The engine can be soon got to work if required, but at present it is not wanted.

— Sept. 9: We have got a good improvement at the shaft. The men have been at some good work for copper ore last night, and brought me this morning some beautiful rich stones of yellow copper ore as can be produced in any mine at the same depth.

KELLY BRAY.—S. James, Sept. 4: The lode in the 135 east is about 1 ft. wide, and letting out more water than it has for some time past; it is producing fluor-spar, mundic, and spots of copper ore. The lode in the stopes in back of the 85 west is much the same as last reported on, worth 12*l.* per fm. The lode in the winze in the 45 west is still worth 30*l.* per fm. for the length of the winze—12 ft. The lode in the 45 east is looking very promising, yielding rich stones of ore, and showing indications that there is a valuable lode not far ahead. We have no change in the tribute department since my last communication.—Eastern Mine: We are getting on satisfactorily with the sinking of Watson's engine-shaft below the 50, and shall be deep enough by the end of the ensuing week to fix the pitmgear at the above-named level, if all be well, which we intend doing at once, before the rainy season sets in: we have all the castings on the mine, and hope to have the main rods and all the other necessary materials which will be required for the completion of the work in the course of a few days. We have driven out about 3 ft. on the branch which was discovered in the 40 cross-cut north, and find it increasing in size—now about 1 ft. wide, looking kindly, composed of mundic, blende, fluor-spar, and rich stones of copper ore, and the ground is of a congenial nature. In my opinion is that the main lode is still further north, as the ground in the cross-cut is very much eased, and mixed up with branches containing mica, blende, mundic, fluor-spar, and rich stones of copper ore, all dipping north, apparently towards the lode.

LADY BERTHA.—J. Metherell, Sept. 8: Moyle's engine-shaft is down 11 fms. 2 ft. below the 30 fm. level; we shall make one sink more, then prepare for the cross-cut to the lode. In the 30 east I think we are getting near the cross-course. No alteration in the same level west. Carter's pitch in the back of the level, east of the cross-cut, is worth 3 tons of good ore per fm. In the eastern end in the 20 the lode is 3½ ft. wide, worth 2 tons of low quality ore per fm. Carter's winze in the bottom of the 20 is down 2 ft. on the south part of the lode. We shall commence taking down the lode in Lambe's pitch next week.

LLANDUDNO.—Sept. 7: We have set a new level to drive south from the old bottom cross-cut on "String Grice" by four men; there is a little ore in it, though not enough to value, but the ground looks very kindly, and there is a considerable piece of untried ground between this point and the boundary of the new mine, where this string has made a great deal of ore. We have also lately started a rise by four men in the north end of the 56 yard level, on the main strings, to prove the beds immediately above this point. The beds to which I refer have been the most productive in the new mine, and we estimate there will not be more than 8 or 10 yards to rise to them. The north end in the 56 yard level, driving and stoping by six men, at 100s. per ton, is not looking quite so well as when last reported, but the ore we get from it is of very good quality, and from the appearance of the end it is likely to improve again shortly. At Trewern's there are four stopes set to ten men, at the old price of 50s. per ton; the only alteration to notice in them is that the ore in No. 4 bargain is improved in quality. The tribute taking was not out this month. We continue to raise waste ore, although, from the low standard of ore at present, the number of hands employed on it has been diminished.

MOLLAND.—T. Bennetts, Sept. 8: The lode in the 32 east is 2 feet wide, worth 8*l.* per fm.; the best part of the lode, however, appears to be in the bottom, and rising up in the end as we go east; the ground is stiff, having come in contact with the hard floor of ground coming in from the north, and which, to all appearance, at present will carry the lode with it a considerable distance; of this, however, I shall be better prepared to give an opinion in the course of a week or two. In the same level west we have a promising lode, 2 ft. wide, worth 8*l.* per fm. In the 20 east the lode appears to be opening wider than I have seen it for some time past, with spots of ore. The stopes in the back

of this level, where we are now stoping, being poor, I intend to remove the men to stope another part of the level, where we have a large grey lode to commence with.

NANTEOS AND PENRHIW.—H. Boundy, Sept. 7: The water is now drained from the mine, and the shaftmen have this day resumed the sinking the engine-shaft, which is now 2 fms. below the 20. We are busily engaged in clearing the stuff from the 20 east, and hope to get it sufficiently clear as to be able to set it by the end of the week; also the sinking of the winze below the 10, which has been already commenced. The stope in the back of the 10 east continues to yield 12 cwts. of ore per fathom; set to six men, at 2l. per fm. The lode in the 36 east yields a little saving stuff, and looks promising for further improvement; set to two men, at 5l. per fathom. The cross-cut at Bwichgwyn is set to four men, at 6l. 10s. per fm., with an inducement to push on to cut the lode as soon as possible. The pitch in back of the 36 east is set to four men, at 7l. per ton. The tributers throughout the mine are working with spirit, and, I believe, getting fair wages; they have another month to work before their take is out. We have now a full supply of water. Our dressing and other operations are now being pushed on with all convenient speed.

NETHEB HEARTH.—Wm. Vipond, Sept. 3: The drift continues to improve; it is now worth 8 cwts. of ore per fm.; set at 50s. per fm., to four men. We are leaving far better ore on the north side than we have in the drift. I have full confidence now in the ore holding on. The flat north continues worth 1 ton per fm.; set to two men, at 70s. per fm. I shall set two men on Monday to stope the bottom of the hard cross-cut, to prove the low flat in the Sun string, where I have reason to believe we shall have good ore.

NEW TRELEIGH CONSOLS.—J. Prince, Sept. 8: The lode in the 60 fm. level west consists mostly of quartz, with stones of yellow copper ore. The bottom stope, which will be brought close to the end to-day, looks better than the end itself, nor does the slate contiguous to the lode contain near so much radiated quartz. In the eastern end the lode is from 2 to 3 ft. wide from wall to wall, but the killas in the middle of the end is not yet worked out; the branches, however, are gradually approaching each other. The north branch is small and sparry, but the south one, which in the middle of the end is about 8 in., and in the bottom 18 in. wide, consists almost wholly of yellow copper ore. The branches are nearly together in the bottom of the level, and, from all appearances, in about 3 ft. more driving they will be found united up and down the end. The sumpmen are cutting a plat, preparatory to commence sinking below the 60 on the course of the lode. The lode in the 50 east is at present small and poor, and the end is suspended driving for the present. In the western end the lode is regular, but it is small, yet it contains stones of ore now and then. The ground in the 50 rise is hard, and the lode is, consequently, wrung up. If we could reach the hollow floors which are frequently met with in this lode the 40 would be immediately drained, and then we might sink a winze in the rise to ventilate the workings. The 40 end is driven far enough east for the rise, and it is, therefore, suspended. The men both in this level and in the 50 will be removed to the 60. In the 40 west the ground in the cross-cut driving south is improving, and the dip of cleavage of the rock has changed from 50° north to 70° south, which is about the dip of the strata in the vicinity of Good Fortune lode. The branch of ore at Nicholson's continues to pay for stoping. We shall sample a parcel of ore at Carr's on Tuesday, and when the mixture is made I will assay a sample, and you shall know its value. I have assayed samples from one heap, which make an average produce of 6 per cent. of fine copper.

NEW WHEAL FRANCES.—C. Carkeek, Sept. 7: We have cut the Wheal Top lode in the deep adit, and broken some splendid stones of tin from it, but being in the cross-course cannot say much about its value until opened on; as far as can be seen of it, it is a very fine-looking lode, and we shall now open east and west on it, and I fully expect it to turn out well. We have set the shaft on this lode to be sunk by nine men, at 7l. per fathom, and have got down 2 fms.; this shaft is sunk partly on the lode and partly on the cross-course, but the water is quick, and for the sake of speed we are letting the lode stand, and sinking in the cross-course. The lode in the shaft at the point we took it down to I value at the rate of 40l. per fathom, and there is a winze a few fms. further west in which, according to the accounts given by the party who last worked there, the lode is equally as rich, so that we may fairly expect to have a productive lode in the deep adit, and some good tin ground to stope away between the shallow and deep adit levels; in fact, if indications are to be relied on, no young tin mine can have better prospects. We are obliged to suspend operations on Bawden's lode until the shaft on Wheal Top lode is holed to the deep adit level.

NORTH BASSET.—T. Glanville, Sept. 8: In the 52, west of the western shaft, the south lode is yielding 2 tons of copper ore per fathom. In the winze sinking below the 82 fm. level the lode is yielding about 2 tons of ore per fm.

NORTH PENHALDARVA.—T. Hodge, Sept. 8: We have erected a whim, and resumed sinking the shaft to-day.

NORTH ROBERT.—W. Godden, Sept. 9: We have this morning intersected the south wall of the lode in the 42 cross-cut south; its size or value we cannot say, as only the wall is seen. The lode where seen, west of the above end, is worth 2½ tons per fm.; so far as seen a good discovery. We have also intersected, I think, the same part by the middle cross-course, about 9 fathoms south of the main lode; this part, so far as seen, is about 1 ft. wide, quartz, mundic, copper ore, and capel—a very promising lode. We shall also see the same lode in the 52 in about a fortnight from this time, and where I have no doubt the lode will be found productive before driven far from the cross-course, as well as when driven on at the 42, where it is largest and best. In the bottom of the end, at the western mine, we are taking down the lode, which, so far as seen, is quite as well as when last reported on.

NORTH WHEAL BUSY.—J. W. Crase, Sept. 8: We are making good progress in sinking the flat-rod shaft below the 15, which in the past month was sunk 5 fms. 1 ft., by six men and three boys, at 7l. 10s. per fathom. In driving the 15 west of the above-mentioned shaft we have met with disordered ground, consequently the lode is at present small and unproductive, but having a large and productive lode in the western shaft, about 16 fathoms before this end, I have no doubt but that the lode will soon assume its former size and value; driving by three men and three boys, at 50s. per fathom. The 15 is being driven south from the flat-rod shaft; in the last 3 ft. driving the end has intersected several branches of quartz, impregnated with mundic and yellow copper ore, showing strong indications of being near a lode; driving by three men and three boys, at 50s. per fathom. Painter's lode, in the western shaft, sinking below the 7 fm. level, is 3 ft. wide, worth 8l. per fathom for tin. No other change to notice.

NORTH WHEAL TRELAWNY.—H. Hodge, Sept. 8: Magor's shaft is sunk 5 fms. under the 40. The cross-cut in the 40 is extended west towards the lode 6 fms. The lode in the winze sinking under the 27 south is as last reported.

OKEL TOR.—W. B. Collom, Sept. 9: In the 65 south we are close touching the copper lode, and the water in consequence has much increased. In the winze sinking below the 50, to ventilate the 65, we are sinking by the side of the lode, and the winze is down 6 fms.; the lode here shows a decided improvement from the little done on it, having only broken into it in ore place at 5 fms. under the 50, the stuff broken from it here consists of ore and mundic, in the proportion of one-third ore to two-thirds mundic. In the 50 east the men are cross-cutting through the lode, the capels of which are very hard to break through, and the ground very wet. In the engine-shaft the shaftmen have fixed the 12-inch plunger-lift to the 65, and everything is in order to resume the sinking the shaft to the 80. In the winze below the 50 we are sinking by the side of the lode, as the ground here is much softer for breaking, our object being to communicate with the 65 as soon as possible; from the improvement of the lode in the winze we anticipate meeting with a good lode in the 65 as soon as that level gets under the winze.

PAR CONSOLS.—A. Stephens, F. Puckey, J. Puckey, Sept 6: Stephens's Lode: The lode in the 180, east of underlay shaft, is 2½ feet wide, worth 18l. per fm. In the 180 west it is still small and poor. In the 150 west it is 4 feet wide, worth 35l. per fm., and letting out a quantity of water. Since last report we have cut the same lode in the 135, west of the underlay shaft, and commenced driving west on its course; the lode is 4 feet wide, worth 50l. per fm. In the 120 west we have intersected a small cross-course, which has disordered the lode, and which is at the present time poor. The lode in the 110 west is 4 feet wide, but poor. The lode in the 100 west is 4 feet wide, and worth 35l. per fm. The lode in the 80 west is 7 feet wide, worth 20l. per fm. The lode in the 50 west is now 3 ft. wide, producing stones of tin and copper.—North part of the Gossan Lode: The lode in the 180 west is still small and poor. The lode in the rise in the back of the 180 is producing saving work for copper. The lode in the winze sinking under the 150, to communicate with the rise in the back of the 180, is 1½ foot wide, worth 15l. per fm. The lode in the 150 west is still small and poor. The lode in the 135 west is 2½ feet wide, worth 15l. per fm.—Gossan Lode: The ends on this lode are much the same as last reported.—Puckey's South Lode: The lode in the 120, west of Puckey's south shaft, is improved, and is now 3 feet wide, worth 15l. per fm. for tin. The lode in the 100 east is small and poor. The lode in the winze sinking under the 100 west is 3 feet wide, worth 16l. per fm. The lode in the 90 east is 4 feet wide, with good saving work for tin and copper.—Puckey's Lode: The lode in the 90 east is 2 feet wide, with saving work for tin. The lode in the 90 west is 4 feet wide, worth 12l. per fm. In the 80 west the lode is 2 feet wide, producing stones of tin. In the 70 west the lode is 3 ft. wide, with saving work for tin and copper. The lode in the 60 west is 6 feet wide, and worth 20l. per fm. Our stopes and pitches are producing about our usual quantity of tin, and, upon the whole, the mine is improved since last report.

PEDN-AN-DREA.—Captains Carpenter and Thomas, Sept. 4: We have cleared the engine-shaft 4 fms. 2 ft. below the 90, and have not as yet seen the bottom; the lode in the side of the shaft is about 4 ft. wide; from a van taken from there yesterday it makes a produce of 9l. per 100 sacks of stuff, or 1s. 9½d. per sack. The 68 rise, west from the engine-shaft, is worth 8l. to 10l. per fathom. The 55 east, on the new lode, is split into branches, with occasional small stones of copper ore; it is not out of the influence of the cross-course. We are pushing on a cross-cut on the cross-course south at Bragg's, to cut the south lodes known to run through in that direction, where the old workers broke large quantities of copper ore in the adit level and above.

PEMBROKE AND EAST CRINNIS.—J. Dale, G. T. Trewren, Sept. 7: The 162 cross-cut, south of Reid's shaft, is without change to notice since last report. In consequence of the air being rather bad at this level, we have taken the men that were driving west on the branch, and put them to stope in the back of the 100 east from Smith's. In the 112 end, east of Smith's shaft, the lode is, where taken down, 2 ft. wide, looking very kindly, producing good stones of ore, and letting out a great deal of water. In the stopes in back of same level, east from footway winze, the lode will produce 2 tons of ore per fathom. The stopes in back of same level, west of winze, will yield 1½ ton of ore. In the 100 end, east of Smith's shaft, the lode is from 3 to 4 ft. wide, and will produce from 1 to 1½ ton of ore per fathom; the stopes in back of this level will yield full 1½ ton of ore per fathom. In the winze sinking in the bottom of the same level the lode will produce from 3 to 4 tons of ore per fathom. Smith's shaftmen are making fair progress in sinking. Ground driven during the week:—The 162 cross-cut, 4½ ft.; the 162 west, on branch, 4 ft.; the 112 end east, 4 ft.; the 10 end east, 3½ ft.; Smith's shaft, 4½ ft.

PENDEEN CONSOLS.—W. Eddy, Sept. 4: In sump shaft the lode is large and orey, with an increase of water. In the 94 end north no lode broken for the week. In the 82 north the lode has improved this week; it has the appearance of the coming in of the ore from the pitches above. In the 70 north the lode is much improved; we have here a fine healthy-looking lode, full 6 feet wide, with its channel of ground, and will produce 3 tons of ore to the fm., worth 5l. per ton—driving for 4l. 10s. per fm.; by all appearances we have come into a new stratum of ground from anything we have seen before. If the ore holds as we are opening, Pendeen will tell its own tale in three months' time. Our stopes are just the same as reported last. We are making all possible speed with our crusher and surface work, in order to get the ore for our next sampling.

PENHALDARVA.—J. Hodge, Sept. 8: I have nothing new to report this week. We sampled on Saturday last two parcels of lead, computed, 21 tons: 1st parcel, 12 tons; 2d ditto, 9 tons.

REDMOOR.—T. Taylor, Sept. 6: The lode in the 20 end north, on the lead lode, is producing about 3 cwts. per fm. We have holed the 40 rise to the 20 winze by a borer hole, and in a few days we shall beat the ground through. The lode in the 80 east, on Kelly Bray, is 5 feet wide, chiefly composed of quartz, peach, and mundic, intermixed with yellow copper ore, but not of sufficient quantity to value. During the past week we have met with several small branches of lead crossing the end in the 80 west, on the counthouse-shaft lode, but not enough to turn house on. No other important alteration.

RITTON CASTLE.—J. Lester, Sept. 9: Since my last the engine-shaft has been sunk 4 ft., now down below the 18 fm. level 9 fms. 2 ft. We had an accident in the driving wheel of the engine which has delayed us, but it will be set to rights by to-morrow.

RIVER TAMAR.—J. Cock, Sept. 6: Our operations are progressing favourably; and there is no alteration since last week. The 70 end west is not yet through the cross-course; the indications are favourable for a discovery of copper.

ROSEWALL HILL AND RANSOM UNITED.—P. Roach, Sept. 8: Since Sept. 1 we have dropped the lift 6 fms., cut down and secured the shaft 3 fms. (this 3 fms. is below the 70, which we intend clearing out as soon as possible), cleared and secured 6 ft. of Tredinnick's shaft, and cleared the 56 from sump to Tredinnick's. At the Ransom we have dropped the lift 10 fms., and secured 2 fms. of shaft, driven 3 ft. north on the cross-course in the 30, and cleared the 20 west 6 fms. The present appearances bid fair for getting on more rapidly for the future, the engine-shaft being in much better condition. The engineers are getting on favourably with the stamps engine.

ROUND HILL.—R. Waters: The sinking of the new engine-shaft below the 52 is progressing as well as the nature of the ground will admit. The lode in the 52, driving south of the shaft, is again resuming its former appearance, being at present 3 ft. wide, composed of carbonate of lime and lead ore. The winze sinking below the 40 south will yield 15 cwts. of lead per fathom; the lode in the stopes in the bottom of this level, south of winze, will yield 8 cwts. of lead per fathom; the stope in the back of this level is worth 10 cwts. of lead per fathom, but is for the present suspended for want of air. The lode in the winze sinking below the 30, north of new engine-shaft, is 4 ft. wide, worth 2 tons of lead ore per fathom. The tribute pitches are yielding fair quantities of lead. We sold on Monday to Messrs. Walker, Parker, and Co., August parcel of lead ore, computed 45 tons, at 13l. 7s. 6d. per ton.

SORTRIDGE CONSOLS.—R. Jackson, Sept. 7: The shaftmen are getting on with their work as fast as possible; they will complete it this week, if all be well. In the 74, east of the cross-course, we have cut the lode, and have cut into it 1½ ft.; it is composed of spar, capel, mundic, and spots of ore: we are not through it yet. In the 50 driving east, on south lode, no lode has been met with to the east of the cross-course. In the pitch in bottom of the 40, west of Cornish rise, there is no alteration since last reported. There is no change to notice in any other part of the mine.

SOUTH CARN BREA.—Thomas Glanville, Sept. 4: In the 68 cross-cut (now about 12 fms. south of the flat-rod shaft) we have cut a stone of copper ore in the cross-course, which I believe to be in connection with a lode, we shall be enabled to see more of its character in a few days.

— T. Glanville, Sept. 8: In the 68 cross-cut, south of the flat-rod shaft, the lode we have intersected is 1 ft. wide, composed of copper ore and mundic; in the 68, east of the flrt-rod shaft, the lode is producing 1 ton of ore per fathom. The other parts of the mine are without alteration.

SOUTH CRENVER.—J. Delbridge, E. Chegwin, Sept. 6: In the 105 west the lode is 1½ ft. wide, yielding good stones of copper ore; in the last 6 ft. driving the lode has very much improved in value and appearance. In the 94 west the lode is 3 feet wide, yielding 1½ ton of ore per fm., worth 4l. per fm. In the 74 the lode is divided in two parts, each part yielding mundic and stones of copper ore. In the 84 east the lode is 3 feet wide, yielding some rich copper ore—2 tons of ore per fm., worth 8l. per fm.; the ground in this end is greatly improved, and from every appearance we are likely to meet with the ore gone down from the 74 fm. level. Our tribute throughout the mine is without change to notice.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—William Roberts, Sept. 7: Tutwork Setting: The 60 to drive east by six men, at 6l. per fm.; the lode is 1 ft. wide, unproductive. The 50 cross-cut to drive north by four men, at 5l. per fm. The tributers in the back of the 60 are breaking rich grey ore.

SOUTH LADY BERTHA.—W. Goss, Sept. 9: I have dialled the lode driven upon in the 20, and am certain it is not the same lode that the winze is sunk upon, being further south, which must be reached by a cross-cut. The lode in the winze, which continues worth from 7 to 8 tons per fathom, has never been seen, except at the 40 fm. level, leaving whole ground to stope away. The water is down 6 fms. below the 20, where I find another level or old working, but cannot yet report upon this until the water is drained, and the level cleared.

SOUTH PENHALDARVA.—T. Hodge, Sept. 8: Our engine-shaft is about 21 fms. 3 ft. below surface; the ground is light blue killas, and congenial for lead. We are now sinking for bearers and cistern, in order to fix the plunger-lift.

SOUTH WHEAL BETSY.—C. Bartle, Sept. 7: We are obliged to discontinue the operations at the whim-shaft for the time for want of air, and have removed the men to drive the cross-cut east of Carpenter's shaft; we hope to resume operations at the shaft as early as convenient. The lode in the rise against the whim-shaft has undergone no important change since my report of last week; the ground is still favourable for rising, and we hope to effect a communication with the whim-shaft as early as contemplated. In the winze on the western lode the lode is still large, and producing good stones of lead. The pitch is much as when last reported. At surface, we have the crusher in course of working, and hope to have the grinder and floors complete by the end of next week.

ST. AUSTELL CONSOLS.—R. H. Williams, Sept. 4: The 45 cross-cut, south of Dowson's shaft, is without alteration to notice. The 35 is still opening on the lode east. West of cross-cut we expect to cut Barker's lode in about a fortnight. In the 25, on north floors of lode, the stopes are looking promising. The eastern stope is very good. South floors of lode at the 25 and Barker's lodes, are looking encouraging. The 15 fm. level is looking better. The western part of the mine is without change, poor at present. All our machinery is working well. I consider the mine is improving altogether.

SUNNYSIDE.—J. T. Bell, Sept. 3: The operations at these mines continue to progress very favourably, and there is now a full staff of workmen in the adit. We shall be enabled to cut 12 or 14 fms. this month, and ought to cut more, but the shale is stronger than usual, and requires a great deal of blasting. The adit is still driving at the rate of 40s. per fm. If no unforeseen difficulties arise, the contract for driving the adit will be completed about the end of next month, making a total distance driven up to that time of 311 fms. When the adit reaches South Beck shaft, and the shaft is sunk down to the level, I should recommend that the operations in the adit be suspended for a short time, and the whole force turned to the engine-shaft, in order to complete the sinking and execution of that part of the undertaking. Upon the completion of the adit close up to the shaft there is a chance of cutting a productive vein in South Beck, the appearances presented in the sinking the 8 fms. of that shaft warrant me in judging so. After the veins at the engine-shaft are proved, then the horse-whim might be removed to South Beck shaft for the drawing whatever material which might arise therein.

TAMAR SILVER-LEAD.—T. Foot, Sept. 7: There is no alteration to notice in the 226 since last report. The rise in the back of the 215 south has been communicated with the winze sinking in the bottom of the 205, and has well ventilated this part of the mine. We have resumed driving the 215 south by the side of the lode. The stope in the back of this level will produce 7 cwts. per fm. The lode in the 205 south is at present 3 ft. wide, and will yield 12 cwts. of lead per fm. The stopes in the back of this level will produce as follows:—No. 1, 10 cwts.; No. 2, 20 cwts.; No. 3, 12 cwts.; No. 4, 11 cwts.; No. 5, 5 cwts.; No. 6, 15 cwts.; No. 7, 7 cwts.; and No. 8, 9 cwts. per fm. The winze in the bottom of the 190 south is suspended until the 205 is further advanced, the water being very quick. The lode in the bottom of the winze is 4 feet wide, and worth 20 cwts. per fm. There are three stopes in the back of this level, yielding respectively 8, 7, and 5 cwts. per fm.

TINCROFT.—Wm. Teague, J. Andrew, J. Cock, Aug. 31: North Tincroft: In the 154, driving west of Tyric's engine-shaft, the lode is 2 ft. wide, and worth for tin 6l. per fathom. In the 154, driving east of shaft, the lode at present is disordered by the cross-course. In the 142, driving east of shaft, the lode is small and poor. In the 60, driving east of Willoughby's, the lode is without alteration since our last.—Highburrow Lode: In the 173, driving east of shaft, the lode is 2½ feet wide, and worth for tin 16l. per fm. In the 173, driving west of shaft, the lode is 2 ft. wide, and worth for tin 8l. per fathom. In the 162, driving east of shaft, the lode is 2 feet wide, and worth for tin 15l. per fm. In the 152, driving east of shaft, the lode is 3 feet wide, and worth for tin and copper 10l. per fm. In the 142, driving west of downright shaft, the lode is 2½ feet wide, and worth for copper ore 15l. per fm. In the 120, driving west of downright shaft, the lode is 1½ foot wide, producing stones of ore. In the old sump shaft, sinking under the 162, the lode is 3 feet wide, and worth for tin 30l. per fm. In the 162, driving west of said shaft, the lode is 3 ft. wide, and worth for tin 25l. per fm.

TOLVADDEN.—F. Gundry, E. Johns, Sept. 8: The engine-shaft is sunk 7½ fathoms below the 20 fm. level, with a large lode, composed of spar and peach, yielding good stones of copper ore; the ground is favourable for sinking. The 20 fm. level is now driven west of the engine-shaft 21 fms., through a good lode nearly all the distance; in the present end we are carrying about 3 ft. of the lode, producing ore, and how much we are leaving to the north of us we do not know; in the last cross-cutting of the lode, 3 fms. behind the end, the ore-course was 6 ft. wide. The 20 fm. level is now driven east of engine-shaft 20 fms.; for the last 10 fms. of this driving we have had a leader of ore, varying from 9 to 15 in. wide. No. 2 winze, sinking below the 10 fm. level, west of engine-shaft, is yielding about 5 tons of ore per fm. No. 3 winze, sinking below the 10 fm. level, west of engine-shaft, is now sunk 1 fm., which is within 7 fms. of Gundry's shaft, yielding from 3 to 4 tons of ore per fm. Gundry's shaft, sinking below the 10 fm. level, is now sunk 3 fms.—ground favourable for sinking. No. 2 winze, sinking below the 10 fm. level, east of engine-shaft, is now sunk 8 fms. 5 ft., yielding about 1½ to 2 tons of ore per fm. No. 3 winze, sinking below the 10 fm. level, east of engine-shaft 35 fms., is now sunk 5 ft., yielding about 4 tons of ore per fm. Patten's shaft, east of engine-shaft, is now sunk 18 fms. below surface; the ground is improved for sinking. Our stopes and pitches are looking well, and our prospects throughout are improving.

TRETOIL AND MESSER UNITED.—R. Rich, Sept. 8: We have put in a stull in shallow level West Mine Park shaft, and have carted stuff from Blind Will's burrow to fill the backs; we shall remove these tin stopes in two or three days, and shall set the stamps to work to stamp tinstuff next week. The shallow and deep adit levels are within a few fathoms of the Tretoil and Messer boundaries; as soon as the arrangements are complete these levels should be driven west into Messer. I have no doubt a great deal of valuable tin ground will soon be laid open near the boundary. The adit, south of Blind Will's shaft, to cut the south tin lode, is being driven by six men; this end is very wet, which I believe indicates our near approach to a lode. Judging from the south lodes seen in the Messer adit, we shall intersect another copper lode before we reach the south tin lode, which is now about 20 fathoms south of the end; the price at which this cross-cut is being driven at present is 5l. 15s. per fm.—Messer: The ground for the bob-pit at Edwards's engine-shaft is excavated ready for the masons, and we expect to be ready at Michell's next week. As soon as the masonry is completed at Edwards's, the capstan, shears, &c., will be refitted, and the dropping of the pitwork to fork to the 20 will be commenced. The little engine at Michell's stood in our way; it has been taken down, and certain portions of it stowed away under cover; a great deal of preliminary work has been done in the past month. We hope to commence shortly in good earnest.

TREVENEN AND TREMENHEERE.—J. Webb, W. Truran, Sept. 3: Work done since last meeting: The pumping and stamping engine has been put in good repair, the iron flat rods replaced with strong wood rods, new angle-bob, &c., one of the stamps' axles put in a more convenient position, and a portion of the tin-dressing floors remodelled. During the time the above work has been doing there has not been any draining going on below the 120, which level had been reached some months before, but various clearing both in old shafts and levels has been carried on.—Proposed work for immediate operations: To fix a plunger-lift in the 120, then clear Tremenheere shaft to the 130, and put that level in a sound state eastward through the whole of Trevenen workings, for the purpose of conveying the water from the Trevenen engine-shaft; this work must be done before any attempt can be made for going deeper than the 130, in the interval the Trevenen engine-shaft will be put in order from surface to the 130. These are the principal points for the present pursuit, so far as preparatory tutwork men will be engaged. At the same time, every attention will be paid in getting a supply of tinstuff for the stamps, which will be complicating the report to detail. Immediate steps will be taken to put all the stamps' heads in working order, and all the dressing laid out with all the improvements connected with tin dressing.—General Prospects: It being known that the former workers had worked the Trevenen part to the 170 from surface, and although it was then (nearly 50 years since) a rich mine, no idea could have been entertained of finding rich tin ground in the upper levels now drained; but it is satisfactory to state that there is abundance of tin ground, both in solid pieces of the lode, and in the sides of the old workings, being the coarser portion of the lode, that will pay well for taking out, there being many advantages over the former workers, half a century ago—viz., the price of tin, cheapness of materials, and means of returning the tin; we state this to show why an abundance of such tinstuff was left to stand in the mine. We cannot promise any definite quantity of tin that will be sold for the next two months, but after that we think ourselves justified in promising that the mine will nearly (if not fully) pay its working cost, while the mine is being cleared up to bottom, where reports state the lode continues its richness. It is our candid opinion that this will be found one of the best and permanent tin mines in the county of Cornwall.

TREWEATHA.—T. Richards, W. Rowe, Sept. 8: The lode in the 90, north from the engine-shaft, is producing about the same quantity of ore per fathom as last reported. In the south end the lode is disordered by a slide. The 50 cross-cut is extended 9 fms. towards the eastern lode. The stopes are producing much as for some weeks past.

VALE OF TOWY.—S. Harper, T. Harvey, Sept. 7: The lode in Clay's engine-shaft, sinking below the 60, is 4 ft. wide, composed of soft barytes, spar, and peach, impregnated with lead. The lode in the 60 north is 2 feet wide, producing a little lead, but not to value. No alteration in the rise in back of this level. The lode in the 60 south is from 6 to 8 feet wide; we are carrying about 4 ft. of the eastern part, which is producing lumps of lead, a very promising end. The lode in Bonville's shaft, sinking below the 50, is 4 feet wide, producing from 15 to 20 cwts. of lead per fathom. The men from the stopes and end have been clearing away the stuff, so that little has been done in the 50 north during the week. The lode in No. 1 stope, south of this shaft, is 3 feet wide, producing 12 cwts. of lead per fathom. The lode in the 40, north of this shaft, is 3 feet wide, producing 12 cwts. of lead per fathom. The lode in No. 2 winze, in bottom of this level, is 3½ ft. wide, producing 18 cwts. of lead per fathom. The shaftmen have been engaged in cutting trip plat below the 50, at Field's shaft. The timber which was put in between the two adits about four years since has failed, so it has cost us four days to repair the same. The lode in the 50, south of Field's shaft, is 2½ feet wide, the last 3 or 4 fathoms have not proved to our expectation at present, producing from 10 to 12 cwts. of lead per fathom. The lode in boundary winze, in bottom of this level, is 3½ feet wide, at times producing fine lumps of lead. The lode in No. 3 winze, in bottom of the 40, south of said shaft, is 2 ft. wide, saving work for lead. The lode in the 30, south of said shaft, is 2 feet wide, impregnated with lead. The lode in Nant shaft, sinking below adit, is 3 feet wide, poor. We have finished cutting ground and putting in timber at shallow adit as high as required. We have about 5 fms. more to complete our side tie at the adit level, south of Field's shaft, and as soon as the launders are in we shall consider our adit level safe. Our pitches throughout the mine look much the same as for some time past.

WEST ALFRED CONSOLS.—S. Lean, R. Stevens, Sept. 7: The ground in the flat-rod shaft, sinking below the 95 fm. level, is favourable—down 4 fms. 3 ft. The lode in the 95 east is about 2 ft. wide, composed of spar, mundic, and ore. The lode in the 85 west is 4 ft. wide, letting out much water, and of a most promising appearance. The lode in the 55 west is embedded in a beautiful killas, driving at 6l. 10s., and producing fully 2½ tons of ore per fm., with every prospect of a further improvement; this we regard as a most important discovery, being in a most congenial channel of ground, and extended further west than any of our other levels; this end is in whole ground to surface, and driving to hill. The lode in the 85, west of engine-shaft, is 2 ft. wide, composed of prian, lead, and spar—ground favourable. The ground in the 95 cross-cut north is still favourable for driving. Jaquemot's lode in the new shaft is 18 in. wide, composed of gossan, prian, spar, and mundic, and looks very promising indeed. We have seen this lode 30 fms. west of said shaft in three pits, where the lode assumes a most promising appearance, containing spar, gossan, and impregnated with copper.

WEST BASSET.—W. Roberts, Sept. 7: In the engine-shaft, sinking under the 134, the lode is 4 ft. wide, producing good stones of ore. In the rise in the back of the 124 the lode continues 3 ft. wide, tribute ground; in the same level west the lode is 3 ft. wide, very promising, with occasional stones of ore. In the 104 east the lode is 2 ft. wide, good tribute ground. In the 84 east the lode is 3 ft. wide, producing 4 tons of ore per fathom.—Engine Lode: In the 75 west the lode is improved, it being 2 ft. wide, producing 3 tons of ore per fathom. The 65 west produces 2 tons, lode 3 ft. wide; the same level east, lode 2 ft. wide, producing 1 ton of ore per fathom.—Wheal Charmer: This is towards the western part of the setf, where an old shaft is being cleared up, said to be sunk some 80 years ago; it is only cleared 6 fms. from surface, and the lode in each end of the shaft is about 3 ft. wide, a beautiful gossan.

WEST GRENVILLE.—S. Berryman, Sept. 6: The lode in the adit end west is not so large as it has been, being closely pressed by a stiff granite rock, but producing very good stones of copper ore. I hope it will soon open again.

WEST PAR CONSOLS.—J. Webb, Sept. 8: The lode in the 65 is 3 ft. wide, composed of capel, with a little tin, driving by eight men at 90s. per fm. No. 2 shaft is sunk 13½ fms. below the 45, lode 2 ft. wide, unproductive. Dawkes' shaft is sunk 9 fms. below the 45, lode 2 ft. wide, saving work for tin. The stopes in the bottom of the 45 are producing good work for tin and copper, but not quite so good as it has been. The lode generally at the above operations has a strong healthy appearance, and likely to yield much tin and copper as we go on to lay open the same.

WEST SHARP TOR.—W. Richards, Sept. 6: We have broken from Morris's shaft in the past week stones of ore equal in quality to any I have yet seen in the mine, and the ground north of the lode is quite as easy for progress. The part of lode being carried in the 110 west is composed of quartz, peach, mundic, and rich grey and yellow ore, a promising end. The lode in the cross-cut, north of the new shaft, is continuing the same character—hard quartz and iron; the water is somewhat increased. The ground in the new shaft is a little harder than it has been.

WEST WHEAL JANE.—J. Tregoning, Sept. 4: The ground in the engine-shaft is very hard for sinking, which makes greatly against us in getting down to the 70. The end going east at the 50 is just as last reported. In the end going east of Tippet's, at the 36, the lode is 4 ft. wide, producing stones of copper ore, with a very kindly appearance. The stopes over the 36 are improved a little since our last, worth for tin, mundic, and copper 15l. per fm. The tribute pitches look a little better. Yesterday we sampled 2176 sacks of tinstuff. To-day we sold at Bissoe smelting house 29 cwts. 3 qrs. 14 lbs. of black tin, which realised the amount of 75l. 18s. 5d., and on Monday next we expect to sample about 53 tons of copper ores, of rather better quality than our last sale.

WEST WHEAL TREVELYAN.—J. D. Osborn, Sept. 4: Cater's shaft is sunk 6 fms. 3 ft., below the 10 fm. level, still dry for sinking. The 10 fm. level, driving east of Cater's, on Park lode, is driven 5 fms.; next week we intend to take down the lode, when we shall be enabled to report its character. The 10 fm. level, driving west of Cater's, on Park lode, is driven 7 fms.; the lode is of a very promising nature. Last Thursday we cut a nice branch of grey ore in the south part of the lode, of a much better quality than that cut in the adit level, being almost free from iron; to-day we have met with a bit of crossing, which has disordered the lode a little at this point, but the ore appears to be dipping west in the bottom of the level. The winze sinking west of Cater's, on Park lode, is sunk 2 fms. 3 ft. on the south part of the lode. We have not done anything on the branch of ore cut in the adit level, as we want to get this winze to the 10 fm. level entirely for ventilation, but as soon as it is holed we shall then commence operations on this branch of ore in the adit level. Our prospects are looking very cheering.

WHEAL ADDAMS.—R. Moore, Sept. 8: The south engine-shaft is progressing as fast as we can. It is my opinion that we shall soon discover the cause of the great destruction of timber in the shaft, as nearly all the sets are carried down, the studdles having given way. We are now about 46 fathoms from surface. The trial shaft is still progressing under the 18 as before stated. The tributers are as last reported. At the 28 the cross-cut going west has reached some old level, whether driven upon a caunter or not I cannot yet say, as many branches are found near this point. I am now driving with the same pare of men on the western blende lode south, in order to get back to cross-cut the lode about the spot where I think the course of grey copper and silver ore is likely to come down from the above levels. My reason for doing this, stopping the cross-cut west for a few weeks until the shaft has reached the 28, is to clear the stuff at least expense. We have now cleared all the ground necessary to commence erecting the buildings to receive the engine to-morrow; and intend to get the boiler on the mine, together with a great part of the gear of the engine. The engineer is in this place, and hopes Mr. Mathews will at once set him at work, as the masonry can be completed while he is putting the engine together.

WHEAL AGAR.—W. Roberts, Sept. 7: In the 70, east of the engine-shaft, the lode is 1½ foot wide, producing 1 ton of ore per fm. In the 70 west the lode is 1 foot wide, with stones of ore. In the 50, east of Windstow shaft, the lode is 2 ft. wide, producing 3 tons per fm., and the winze sinking under the same level produces 3½ tons of ore per fm. In the 50, east of the eastern shaft, the lode is 1 ft. wide, turning out 1 ton per fm.

WHEAL ARTHUR.—T. Carpenter, Sept. 6: There is no particular change in the mine since last week, excepting a greatly increased quantity of water in the 20 east cross-cut south to old lode in the eastern mine. The other bargains are going on well, and I trust to have some good news for you soon.

WHEAL BAL.—H. Trezise, J. Bennetts, Sept. 6: We are driving the 50 fm. level end on Wheal Bal lode, west of Thomas's shaft, by three men—present price 5l. per fm.; the lode is 6 in. wide, poor, composed of quartz, capel, and mundic. Driving the 50 fm. level end west of Thomas's shaft, on Wheal Bristol lode, by two men—present price 8l. per fm.; the lode is 9 in. wide, composed of quartz and spots of tin, with mundic and capel, but nothing to value. Driving east of Coulson's shaft, on Morvah men's lode, by one man and a boy—present price 5l. 5s. per fm.; the lode is about 8 in. wide, composed of quartz and capel, without tin. Driving a cross-cut west of White's shaft to cut Morvah men's lode, and expect to cut this lode at about 9 ft. further, by two men—present price 6l. per fm. Driving the 30 fm. level end east of White's shaft, on Morvah men's lode, by two men; the lode in this end is 1 ft. 3 in. wide, composed of quartz, capel, and tin, worth about 40s. per fm. for tin—present price 5l. per fm. We have commenced to erect a horse-whim, in order to resume the deep adit level end on Morvah men's lode, east of White's shaft, and from the appearance of the surface the old men must have raised a good quantity of tin: 47 men and 6 boys are working on tribute, at an average of about 13s. 4d. to 18s. in 1l.

WHEAL CHARLOTTE.—B. Gundry, F. Hosking, Sept. 4: The 60 cross-cut, south from engine-shaft, is still in faveurable ground. The 40, east of Trevelyan's shaft, is again producing ore—about 1 ton per fm. The 40, west of Trevelyan's shaft, is worth 16l. per fm.; the stope in back of this level is worth 20l. per fm. No. 1 winze, below the 30, west of Trevelyan's shaft, is worth 18l. per fm.; No. 2 same level, about 20l. per fm. There is no alteration to notice in any other part of the mine.

WHEAL EDWARD.—M. H. East, Sept. 6: North Lode: The ground in the diagonal shaft is rather troublesome for sinking at present, being mixed with capel and spar—sinking by nine men, at 28l. per fm. The lode in the 71 west is small, and produces good stones of ore occasionally—driving at 5l. 10s. per fm. The lode in the 52 west is about 2 ft. wide, composed of capel, spar, mundic, and spots of ore—driving at 5l. per fm.; the end is very wet.—South Lode: The shaftmen are engaged cutting ground for plat in the 71, and will push on with the necessary work required to be done preparatory to sinking. The lode in the 71 east is worth 2 tons of ore per fm., and in the same level west the lode produces good stones of ore—driving at 5l. 5s. per fm. The lode in Sleman's winze, sinking below the 61 west, is worth 2 tons per fm. (for 6 ft.)—sinking at 8l. 10s. per fm.; the lode in the 61 west is without change, poor—driving at 6l. per fm.; the ground has a little better appearance; we have

WHEAL GRENVILLE.—G. R. Odgers, Sept. 4: We are making about our usual progress in sinking the engine-shaft below the 66, but we have not taken down any lode this week, consequently there is nothing new to report; I hope to take it down next week, when you shall be fully advised about its character, &c. The lode in the 66, east of the shaft, is full 3 ft. wide, composed principally of a very congenial spar, with a little tin, but not enough to save; there is a great deal of water coming from the lode, and it is showing a very promising appearance. In the western end, same level, the lode is about 12 in. wide of quartz, which is alive for ore—a kindly lode. We have hoted the winze sinking below the 54, which has ventilated the 66; as soon as it is squared down we shall commence the cross-cut north in the latter level.

— G. R. Odgers, Sept. 8: I beg to inform you that the lode in the engine-shaft to-day is 2 feet wide; the south, or principal part of the lode, varies from 9 to 18 in. wide, composed of ore—greens, grey, and black and yellow ore, embedded in quartz, and gossans, with a kind of blue chlorite, altogether a very promising looking lode, and had it been dry it would produce full 1½ ton to the fm. from this shaft; there being a great deal of water, we cannot of necessity make the most of the ore. The lode in the eastern end in the 66 is large, and presenting a masterly appearance. We have to-day commenced the cross-cut north in the 66 fm. level, in order to intersect some of the side lodes, and may they prove successful. I broke some very good stones of ore in the western end of the shaft yesterday; the lode is again improving. I will write you more particulars in the course of a day or so, because there is a dropper or flank on the south wall, which is a good feature.

WHEAL HARRIETT.—S. Williams, Sept. 4: There is no alterations to notice in the underground operations during the week. The copper ore sold on Thursday last—No. 1, computed 36 tons, weighed off, 37 tons 3 cwts.; No. 2, computed 9 tons, weighed off 9 tons 8 cwts. 1 qr.: amount of sale, 330*l.* 10s. 3d. Next week I intend selling the tinstuff now on the floors, which I think will realise about 20*l.*

WHEAL KITTY (St. Agnes).—M. Edwards, J. Nicholas, Sept. 4: The lode in the 90 ends is showing signs of improvement as they are advanced out of the influence of the cross-course. In the western end it is 2½ ft. wide, and worth 8*l.* per fm.; in the same level east it is 2 ft. wide, and worth 7*l.* per fm. The lode in the 82, driving west, is 6 ft. wide, and worth 20*l.* per fm.; in the same level east it is 4 ft. wide, composed of mundic, jack, and tin, and worth 12*l.* per fm. We are cutting a trip-plat at this level, and are about to lay down tramroads to the ends, which will be of great advantage in bringing the stuff to shaft. The lode in the 72, driving east, is 18 in. wide, and worth 7*l.* per fm.; and in the stopes in back of this level it is also 18 in. wide, and worth 6*l.* per fm. In the 63 west the lode is 2 ft. wide, and worth 10*l.* per fm. In the 54, driving east of Sunny Corner shaft, it is 2 ft. wide, and worth 8*l.* per fm.—Holgate's Shaft: This shaft is now down 12 fathoms below the 75, and we shall now cut a fork, take down the lode, and commence driving west on its course; the lode has been partly cut into, and is of a most promising kind; but we have not yet reached the footwall, and cannot at present state its proper value. The rise in the back of the 54 west will be communicated to the winze sinking from the 44 over this place in a week or two more. The lode in both places is similar in size and value—2 ft. wide, and worth 10*l.* per fm. No alteration in tribute department.

WHEAL MARY ANN.—P. Clymo, H. Hodge, R. Knapp, Sept. 9: Pollard's shaft is sunk 13 fms. under the 150. The lode in the 150 north is 4 ft. wide, and worth 7*l.* per fm.; in the same level south it is 3½ ft. wide, and worth 6*l.* per fm. In the 140 north it is 2 ft. wide, producing good stones of lead; in the same level south it is 2½ ft. wide, and worth 10*l.* per fm. In the 130 north it is 2 feet wide, and worth 6*l.* per fm.; in the same level south it is 1½ ft. wide, and worth 18*l.* per fm. In the 120 north it is 2 ft. wide, and worth 11*l.* per fm.; in the same level south it is 2 ft. wide, and worth 7*l.* per fm. In the 110 south it is 2½ ft. wide, and worth 9*l.* per fm. Clymo's engine-shaft is sunk 12 fathoms under the 95. The stopes and pitches are producing much as usual.

WHEAL MARY EMMA.—Wm. Doble, Sept. 9: I have let the engine-shaft to sink by six men; their contract is to sink and timber the same from the surface to the bottom of the adit for 16*l.*; the shaft is to be carried 10 ft. long by 6 ft. wide, and to be known in future as Lare's engine-shaft. The lode in the bottom is still good for copper and tin.

WHEAL RUSSELL.—A. Barratt, Sept. 9: The lode in the 74, driving east from Matthews's shaft, is at present worth ½ ton of ore per fm. No lode has yet been met with in the 62 driving north on the cross-course; the ground appears to be getting harden than it has been heretofore. In the winze sinking below the 62, the lode is producing good stones of ore. There is nothing new to report in any other part of the mine.

WHEAL TREFUSIS.—Z. Carkeek, Sept. 9: The engine-shaft is sunk to the 67, and we have commenced to drive a cross-cut north to cut the north lode. In the 55 east the lode is 3 ft. wide, composed of spar and flookan with a little tin. The stopes in back of the 55 yield tin worth about 6*l.* per fm. In the 42, south lode, we are rising up in the elvan course, where we expect the lode to improve above the elvan. In the 30, east of Nicholls's shaft, the lode is 3 ft. wide, composed of soft spar and prian with a little tin, with a promising appearance for improvement. In the 30 fm. level we are driving north of Nicholls's shaft to intersect the north lode. In the 15, east of Nicholls's shaft, we are driving south on the cross-course; we expect to cut the lode in the present week. The tribute pitches are yielding tinstuff of average quality, as was last reported.

WHEAL TRELAWNY.—W. Jenkin, W. Bryant, T. Grenfell, Sept. 9: Smith's shaft-men have been engaged this week in dividing and casing the shaft from the 142 to the 152. The lode in the 142, north of Smith's shaft, is 3 feet wide, worth 20*l.* per fathom; in the same level south the men are engaged in cutting through the slide. In the 132 north the lode is 3 feet wide, worth 12*l.* per fathom. In the 132, south of Chippindale's, it is 3 feet wide, worth 6*l.* per fathom. In the 120, north of Chippindale's, it is 3 feet wide, and worth 6*l.* per fathom. In the winze sinking in the bottom of this level it is 2 feet wide, worth 7*l.* per fathom.—South Mine: Trelawny's shaft is sunk 6 fms. 3 ft. below the 142. The lode in the 142, south of the shaft, is 2 feet wide, worth 8*l.* per fathom; there is no improvement to notice in the north end in this level. In the 130 south the lode is 3 feet wide, worth 10*l.* per fathom. In the 107 north it is 2 ft. wide, worth 7*l.* per fathom. The stopes and pitches are producing a fair quantity of ore. We sold, on Saturday last, 85 tons, computed, of crop lead ore, at 23*l.* 1s. per ton, to Messrs. Walker, Parker, and Co.; 60 tons, computed, of second quality lead ore, at 8*l.* 12s. per ton; and 1 ton, computed, of copper ore, at 14*l.* 8s. per ton, to Messrs. Sims, Willyams, and Co.

WHEAL TREMAYNE.—R. Williams, J. Williams, Aug. 30: At the boundary engine-shaft, the shaftmen are still engaged cutting plat in the 123 preparatory to sinking below that level. In the same level, east of shaft, on Allen's branch, the branch is large, yielding good tinstuff in places; the ground is still unsettled, and mixed with flookan. In the 113, east of Allen's shaft, on Allen's branch, the branch is improving, being now worth 12*l.* per fm. The stopes in back of the same level, west of shaft, are yielding their usual quantity of tinstuff, worth 7*l.* per fm. In the same level, east of shaft, stripping down a south branch west of winze, the branch is worth 7*l.* per fathom. In the 103, east of the same shaft, on Allen's branch, the branch is worth 8*l.* per fm. The stopes in back and bottom of the same level are worth on an average 14*l.* The stope in bottom of the 73, east of the shaft, on Allen's branch, is worth 8*l.* per fm.

WHEAL UNION.—T. Glanville, Sept. 8: There is no alteration to report on.

WILLOW BANK.—W. Paull, Sept. 7: Our engine has been working ever since my last report, and now, I am glad to say, the water is sunk to the 30, and by to-morrow morning, if all goes well, it will be in fork to the bottom, when we shall recommence with all possible vigour. The engine-shaft is set to nine men, at 14*l.* per fm. The 30, east of engine-shaft, to six men, at 7*l.* 10s. per. fm. A cross-cut to drive south in the 30, 2 fms. east of engine-shaft, to two men, at 6*l.* per fm. All the above bargains are set until our next pay-day, Sept. 18. Everything shall be pushed on as fast as possible.

MINING AGENTS SUMMONED FOR BREACH OF RULES.—At the Rotherham Petty Sessions, on Monday last, Mark Davy, colliery manager, was charged by Mr. Chas. Morton, Inspector of Coal Mines, with violating the rule which requires that an adequate amount of ventilation shall be constantly produced to dilute and render harmless noxious gases, to such an extent that the working places of the mine, under ordinary circumstances, be in a fit state for working. Mr. Skipworth, solicitor, of Wakefield, who appeared for the prosecution, stated that the defendant was principal agent of the Grange Colliery, near Rotherham, belonging to Mr. George Chambers, of High Green. On July 10 an explosion of fire-damp occurred in the Silkstone coal seam, by which three persons were killed and a fourth seriously burnt; and the Secretary of State had since authorised Mr. Morton to institute legal proceeding against the defendant for neglect of duty. On July 7 the miners, under defendant's directions, were driving a single boardgate, 150 or 160 yards long, across a "throw," or dislocation of strata, which in a neighbouring estate was known to have yielded inflammable gas. On piercing the throw in the boardgate, there was a sudden influx of fire-damp; and on July 8 a stopping was built across the boardgate about 30 yards from the face, so as to confine the gas within that limit. On July 10 the deceased miners and Joseph Davy were employed by the defendant to remove from the other part of the boardgates some water pipes, the farthest of which passed through the stopping, and the deceased miners rashly, and in opposition to orders, broke through the stopping, to get out more water pipes. The accumulated fire-damp was thereby set free, and produced the explosion referred to. The only attempt at ventilation in this part of the mine had been by a wooden brattice, extending about 150 yards down the boardgate, and fixed at 2 ft. from one side and 3 ft. from the other; but this partition was very imperfect, the air escaping through the numerous joints and crevices. There ought to have been two boardgates for ventilation, with a solid pillar of coal between them, so that a current of air might go along one of the boardgates, and return along the other; the air being carried by brattice only a few yards from the last "slit" to the faces or extremities. To depend on brattice alone for conveying air so great a distance was dangerous, and contrary to modern mining practice in Yorkshire. Moreover, the boardgate was too narrow and low to admit sufficient air by brattice even of tight construction. To add to the risk, the ventilation of this boardgate depended entirely on a single door placed in the principal airway, and contrary to a special rule, which required double doors to be fixed. Lastly, the ventilating furnace had not been attended to, according to the rules. Fire-damp might reasonly be expected in the Silkstone coal when "throws" were intersected; and carbonic acid gas, or black damp, was frequently present in this mine, demanding a plentiful supply of fresh air to remove it; yet the defendant omitted to take the usual precautions for the protection of the workmen. Witnesses being called to prove these statements, Mr. Whitfield, solicitor, of Rotherham, addressed the Bench on behalf of the defendant, who, he said, was anxious to comply with all the requirements of the law. The colliery had been at work two years without any accident; and until July 7 last fire-damp was unknown there. He contended that under section 7 of the Act of Parliament the Government Inspector ought to have given a written notice to the defendant before commencing these proceedings, and that not having done so the case must fail. This objection was overruled by the Bench. Mr. Whitfield then called a number of witnesses to show that the ventilation was adequate under ordinary circumstances, but that no foresight could have provided against so unusual and unexpected an influx of imflammable gas. The magistrates decided that the case was proved, and fined the defendant 1*l.* and costs. Some other charges arising out of the mismanagement and wrong ventilation of the colliery were also brought against the defendant, upon which he was mulcted in various fines. The penalties and costs amounted altogether to 5*l.* 8s. 6d.—George Gillings, the underviewer, of the same colliery, was then charged with having neglected to see that the ventilating furnace was constantly attended to since the explosion, and as enjoined by the special rules, and he was fined in a penalty and costs amounting to 1*l.* 5s.

NORTH WALES MINING DISTRICTS.—There is but a very slight improvement in the state of the coal trade in the district of Wrexham; indeed, in some places it is even flatter. At Brymbo, there is some alteration for the better in the coal and iron trades, but in the immediate neighbourhood it remains much the same The coal trade in the Ruabon district is particularly depressed, including business at the Ruabon Coal Company, where the men are working four days per week. At the Acrefair Iron works business fortunately continues prosperous and brisk, some good orders having been received during the week. Throughout the whole district there is a generally prevailing impression that trade will soon resume its wonted activity, as it is considered that the worst point has been passed. Money is plentiful, and speculation in trade is, therefore, anticipated.

MUSEUM OF ECONOMIC GEOLOGY.—This popular educational institution is re-opened to the public to-day.

IRON MANUFACTURE.—All interested in the make or use of iron should read Mr. Rogers's new work on *Iron Metallurgy*:—
"I do not hesitate to say Mr. Rogers's work is the most complete combination of sound science and sound practice that has yet appeared on Iron—beyond comparison."—DAVID MUSHET.—Published at the *Mining Journal* office, 26, Fleet-street.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 10, 1858.

COPPER.	£	s.	d.
Copper wire .....p. lb.	0	1	1¼–1 0½
ditto tubes ..... „	0	1	1¾–1 2
Sheathing & bolts .. „	0	0	11½– —
Bottoms ..... „	0	1	0–0 1 0½
Old (Exchange) .... „	0	0	10– —
Best selected....p. ton	105	10	0– —
Tough cake..... „	102	10	0– —
Tile ..... „	102	10	0– —
South American.. „	92	0	0–94 0 0

IRON.	Per Ton.		
Bars, Welsh, in London..	7	0	0– —
Ditto, to arrive	6	15	0– —
Nail rods	7	10	0– —
„ Stafford. in London	8	0	0– 9 0 0
Bars ditto	8	10	0– 9 10 0
Hoops ditto	9	5	0– 9 15 0
Sheets, single	9	10	0–10 10 0
Pig, No. 1, in Wales ..	3	15	0– 4 15 0
Refined metal, ditto....	4	10	0– 5 5 0
Bars, common, ditto....	6	0	0– 6 5 0
Ditto, railway, ditto ..	6	5	0– 6 7 6
Ditto, Swed. in London.	12	15	0–15 0 0
In stock to arrive....	—		– —
Pig, No. 1, in Clyde....	2	14	6– 2 17 6
Ditto, in Tyne & Tees..	2	19	6– 3 2 6
Ditto, forge.....	2	17	6– —
Staffordshire Forge Pig.	4	10	0– 5 0 0
Welsh Forge Pig	3	0	0– 3 5 0

LEAD.			
English Pig	21	5	0–22 0 0
Ditto sheet	22	5	0– —
Ditto red lead	23	15	0– —
Ditto white	27	0	0–30 0 0
Ditto patent shot	25	10	0– —
Spanish	20	0	0–20 10 0
American	none.		

BRASS.	Per lb.
Sheets	10d.–11d.
Wire	10d.–10½d.
Tubes	12d.–12½d.

FOREIGN STEEL.	Per Ton.		
Swedish, in kegs (rolled)	none.		
„ (hammered).	20	10	0– —
Ditto, in faggots	22	0	0– —
English, Spring	18	0	0–23 0 0
QUICKSILVER .....p. lb.	0	1	11– 2 0

SPELTER.	Per Ton.		
Foreign	24	0	0– —
To arrive	23	15	0– —

ZINC.			
In sheets	30	0	0– —

TIN.			
English, blocks	118	0	0– —
Ditto, Bars (in barrels)..	119	0	0– —
Ditto, Refined	121	0	0– —
Banca	115	10	0–115 11 6
Straits	114	0	0–115 10

TIN-PLATES.*				
IC Charcoal, 1st qua. p. bx.	1	12	0– 1 15 0	
IX Ditto 1st quality „	1	18	0– 2 1 0	
IC Ditto 2d quality „	1	10	0– 1 11 0	
IX Ditto 2d quality „	1	16	0– 1 17 0	
IC Coke ..... „	1	5	6– 1 6 0	
IX Ditto..... „	1	11	6– 1 12 0	
Canada plates ....p. ton	15	0	0–15 5 0	
In London; 20s. less at the works.				
Yellow Metal Sheathing..p. lb.	10d.– —			
Wetterstedt's Pat. Met. ..p. cwt.	2	2	0	
Indian Charcoal Pigs in London	—	– 7	10	0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—In the price of metals there has been very little alteration,—in fact, scarcely any deviation from last week's currency, the general bearing of the market tending to preserve steadiness in the value of all descriptions of metals; at the same time, with the experience of the past twelve months of the constant uncertainty arising in business, but little confidence can even yet be confided in the tone and appearance of our market; so frequently has it occurred of late that as soon as an upward tendency has been visible, there has been almost invariably some check; the demand suddenly falls off, and instead of enhanced prices being realised, lower rates than previously quoted are obliged to be accepted, otherwise buyers decline entertaining further purchases, and the market again relapses into a dormant and lifeless condition. The season has now so far advanced that it is unlikely a very healthy state or things will last for any long time together during the remainder of this year; but, probably, by the commencement of the ensuing year the difficulties of various kinds that have beset, oppressed, and interfered with trade, will be overcome.

COPPER.—The reduction in the fixed rate of copper, from 12d. to 11½d. per lb., seems at present to have made no palpable impression, buyers still being disinclined to operate on their own account; most of the orders that have been given out being comparatively small, and consisting of *bona fide* shipping orders. The trade having become accustomed to considerable movements on the part of the smelters, look upon the present moderate reduction as merely preparatory to a further decline; anything less than 1d. per lb. appears only to unsettle the market; although, in an ordinary way, it is undoubtedly quite sufficient, and would most likely be found to work better after awhile, if it were adhered to.

IRON.—Enquiries are not by any means numerous for any particular kind of iron, but most of the works are busier in general manufacture. Rails are still to be bought at 6*l.* 5s., and may be considered not quite such a close quotation as it was a fortnight since. Welsh bars are also easier. North of England bars are being offered at prices in close competition with Welsh, and when a matter of 2s. 6d. per ton is no object, a good soft iron can be secured at 6*l.* 15s., being the present price for Newcastle bars, and 6*l.* 12s. 6d. to 6*l.* 15s. per ton for Welsh or English bars. Staffordshire descriptions have been taken a little more freely, and prices, for the most part, have been fairly maintained. Swedish bars in moderate demand at about 12*l.* per ton. Scotch pigs are rather lower, and mixed numbers are now quoted at 54s. cash, g.m.b., f.o.b. in Glasgow.

LEAD.—The market keeps very quiet, and sellers experience a difficulty in obtaining the advanced rates; a concession is not improbable, as there is very little enquiry at present.

SPELTER.—For arrival some business has been transacted at 23*l.* 17s. 6d. to 24*l.* per ton for shipment in Oct. and Nov. next; there have also been a few parcels changed hands, for delivery on the spot, at same prices. The stock here must not be overlooked by buyers, as it now amounts to 4000 tons, being considerably greater than we have had for some years past; to to effect purchases, therefore, at 24*l.* does not offer, apparently, sufficient margin to speculate.

TIN.—English remains as previously quoted, although stocks are reported heavy in smelters' hands, and quick deliveries can be made. Foreign is still quiet, but steady, the market making very little progress.

TIN-PLATES.—Quotations are easy, and have a declining tendency.

STEEL.—Swedish keg in request at former rates; stocks are light.

QUICKSILVER.—No alteration either in demand or quotation.

LIVERPOOL, SEPT. 9.—Our metal market continues to exhibit symptoms of improvement, although gradual. There is decidedly more disposition on the part of buyers to give out what orders they may have on hand, from which may be inferred the impression that prices have seen their lowest, and a more prosperous state of things is in progress. Welsh iron appears to be principally in demand, the orders for rails still keeping the works well employed. Orders for bars are also more plentiful. Staffordshire qualities are not so much wanted. The price of Scotch pig-iron has receded during the week to the extent of 1s. per ton; business in this article has been but limited, speculation for the time appearing to be inactive. The shipments continue to be in excess, being 11,727 tons, against 9270 tons for the corresponding week of last year. The stocks in storekeepers' hands are steadily increasing, notwithstanding that the shipments are on so extensive a scale. A fair amount of business is reported in copper. For foreign there is more enquiry; there is no further change in prices. Tin shows no alteration; the demand is steady. Tin-plates are less enquired for, and prices favour buyers. Lead is quiet. The following are the quotations:—Iron: Merchant bar, 6*l.* 7s. 6d. to 6*l.* 10s. per ton.—Tin: Common block, 118*l.* per ton; common bar, 119*l.*; refined block, 121*l.*—Tin-plates: Charcoal, IC, 31s. to 32s. per box; coke, IC, 24s. 9d. to 25s. 3d.—Lead: English sheet, 23*l.* 10s. per ton; English pig, 21*l.* 10s.—Copper: Cake and tile, 102*l.* 10s. per ton; best selected, 105*l.* 10s. per ton; sheathing and bolt, 114*l.* per lb.—Yellow metal sheathing, 9½d. per lb.—Steel: Blistered, 30*l.* to 40*l.* per ton; spring, 18*l.* to 24*l.*; cast and shear, 50*l.* to 60*l.* per ton.

GLASGOW, SEPT. 9.—Since last report our market has continued very steady, with a considerable amount of business at from 54s. to 54s. 3d., cash prompt, and 55s. to 55s. 3d., three months open. Shipments continue very good, and will be heavy for several weeks to come. Fresh orders do not come in well, however, and makers' iron is still freely sold at the full difference under the warrants price. We may mention that, at a season when iron almost invariably goes out of store, we have increased the stock in Connal's yards by about 13,000 tons. No. 1, g.m.b., 53s.; No. 3, 52s. 9d.; No. 1, Gartsherrie, 58s.

NEW YORK, AUG. 28.—Scotch pig-iron continues in moderate demand at $22 cash, and $22·50 to $23 at six months. Bar is quiet from first hands, and the price is firm at $45 to $47·50 for common English, and $55 to $57·50 for refined; there is a brisk jobbing trade doing at a trifling advance upon those prices. Ingot copper is in good demand, but the prices are without alteration; we note sales of 400,000 lbs. of Lake Superior, for exportation, at 22 c., four months; also 26,000 lbs. of Baltimore at 21¼ c. to 21¾ c. No change has taken place in old copper, sales of 8000 lbs. having been effected at 20 c. cash. Copper bottoms are offered at a reduction, the latest quotation being 36 c. six months. In block tin but very little has been doing; sales of 500 slabs Banca to arrive have been effected at 27¼ c. to 27½ c. There has been but few transactions in tin-plates, holders being firm at previous prices. The demand for spelter has been very limited, and sellers are asking 6¼ c. six months.

There is a continued demand in the MINING MARKET for shares in good dividend and rising stocks, but no particularly new feature since our last. Prices, on the whole, remain steady, though some, as will be observed, have slightly receded. In reference to some remarks upon Devon Great Consols Mines, which appeared in this article of last week, a letter will be found in another column. It appears the mines are looking better than they did 12 months ago, and that the reserves during that time have increased (a thing that can hardly be said of many other mines), and that the bottoms have not been so promising for years, although just at present the deep levels at Emma are poor. Great Alfreds declined to 4, and were flat early in the week, but rallied afterwards, leaving off firmer, at 4¼, 4½: the ends are not looking so well, but the prospects of the mine are favourable; the shaft continues rich, and the 190 end has been driven about 10 fms. east and west, through a lode worth 50*l.* per fm.; the east end is now poor, but in a few fathoms further driving it will get under the ore ground driven through in the 180; the 190 west, now worth 15*l.*, is nearly 10 fms. from the main shoot of ore, and these are two important points for the shareholders to watch, as either of them may cause a great and sudden rise in shares. Whilst on this subject, we may remark we often hear it said by speculators in mines that they cannot understand the regular weekly reports; and, indeed, without they are followed up, and the workings of the mine fully understood, they are certainly difficult to comprehend. There are, however, always particular points of interest in mines prominently before the public which are watched eagerly by the "knowing" dealers, and upon which a rise or fall is calculated; and these we have generally endeavoured from time to time to point out to our readers in this article. Alfred Consols have been more in request, owing to an improvement, and the price rose to 10, 10½. Rosewarnes have fluctuated from 34 to 36, and leave off at 35, 37½; the mine is said to be looking as well as ever in the 58, and shares have been freely purchased in Cornwall. North Roberts have continued in good demand, and a large business done, at 2½, 2¾; leaving off, 2¾, 2¾: we are glad to see this improvement, for our readers will remember that on Aug. 14 we stated the shares had fallen from 5 to 1½, without adequate cause, and that two or three important points were coming off. East Russells more in demand, and leave off, 5¼, 6. South Frances, 200 to 205; at the meeting, on the 6th inst., the accounts showed a profit on the two months' working of 226*8l.* 15s., and a dividend of 198*4l.* (4*l.* per share) was declared, leaving balance in hand, 119*8l.* 6s. 6d.; the report of the mine is more favourable, and there has been a good lode during the past two months in the 114 and 104 fm. levels, on the new north lode. Wheal Ludcott shares have been in demand at 30s. to 31s.; this mine is looking well, and likely to take a better position. South Carn Brea have been in demand, and advanced to 4¼, and leave off at 4¾ to 4¾, buyers. Sortridge Consols have not been so firm, and leave off at 21s. to 22s. 6d. Wheal Margery more in request, at 11¼ to 12; Herodsfoot, 6¾ to 7; New Wheal Frances, 15s. to 16s.; Wheal Uny, 5 to 7. Wheal Margaret, 56 to 58; this mine looks well; the 100, east of King's winze, is said to be worth 100*l.* per fm., and set to drive at 3s. 3d. in 1*l.* for tin, and 20*l.* per fm. East Carn Brea, 5 to 6; the mine continues to look well in the winze below adit, and in the 14 end east; sinking will be commenced below the 14 this week, and if the lode be cut good shares will go high. East Bassets have remained quiet, with very little business doing, speculation appearing to wait for cutting the lode; price leaves off at 97¼, 100. South Caradon, 402¼, 405¼. Grambler and St. Aubyn not quite so firm, and have receded from 145 to 133, 138, ex dividend of 2*l.* per share declared at the meeting; the mine, it appears, looks equally well. Carn Brea in request at 52¼, 55. Great South Tolgus have not been so firm, at 14¼, 15¼. Wheal Kitty (Lelant), 8¼, 9; Hingston Down, 3, 3¼; North Crofty, 3¼; Providence Mines, 57¼, 60, ex dividend. Buller and Basset, 20s.; the lode at the shaft is 4 ft. wide, with fine stones of ore, and granite becoming more decomposed. Gernick, 1; ground easier for driving. Old Tolgus, 32½, 37½; South Tolgus, 72½, 77½, and a large business done. United Mines have been flatter, at 80, 85; Treweatha, 17s. 6d., 20s.; West Seton, 270, 280, mine said to be looking much better; Wheal Mary Ann, 43½, 44¼, and rather flat; Trelawny more in demand at 24½, 25½; Wheal Basset, 195, 200; Bell and Lanarth, 4½; Camborne Vean, 1¾, 2½; Pendeen, 3½; East Gunnis Lake and South Bedford, 1½, 1¾; East Tolgus, 50, 55; Redmoor, 6s., 7s.; Wheal Grenville, 33s., 35s., a further improvement has taken place at the shaft since the receipt of the weekly report. North Downs, 1¾, 2¼; South Basset, 4, 4¼; Tolvaddens have been more in request at 6 to 6½, mine looking well in the 20 west; Wheal Harriett, 17s. 6d.; Wheal Hender, 1¾, 1¾, and enquired for; Vale of Towy, 17s., 18s., the 84 tons of ore realised for this month 1050*l.*, and now that the hindrances to which we referred a short time since have been removed, the returns for the future, it is expected, will increase. Condurrow, 40, 45; a new lode is said to have been cut, and the cross-cut also near the Llandower lode. Ding Dong, 11, 12½; Par Consols rather more enquired for at 17 to 17¼; Tamar Consols, ⅞, ¾, also enquired for.

In the COAL MARKET, there has been but very little doing during the week, there having been but a very indifferent supply of ships at market. Holders have been firm at previous prices. Hartley's and manufacturers' coals are quoted at an advance of 6d. On Monday, there were only 31 ships at market, the whole of which were sold. Wednesday's market was much better supplied, there being 57 ships at market, but as there was a good demand for all descriptions of house coals, only 8 ships were left unsold. Yesterday, the market was better supplied, 91 ships being at market, 75 of which were sold; the closing prices were—Best Wallsend, 17s. 9d. to 18s.; best seconds, 15s. 9d. to 16s. 6d; manufacturers', 12s. 6d. to 13s. 3d.; Hartley's, 15s. to 16s.; Duffryn Steam, 21s.

COAL CONTRACTS.—The West Ham Union require tenders for the supply of Stewart's, Russell, Hetton, and Clay Cross, or Silkstone, for twelve months: 150 tons of steam coal, and 50 tons best Wall's End screenings, wanted for the Essex Lunatic Asylum, Brentwood. Tenders are also wanted by the vestry of St. Mary, Newington, for the annual supply of coals; quality or description required not stated.

In SALTPETRE, fine qualities have not been much in demand, and former prices have with difficulty been maintained, but there has been a great demand for refining at 1s. to 2s. advance upon previous quotations; in the public sales great activity has prevailed, and the whole of the quantities offered have been sold, the latest quotations being—for Bengal, 14¾ per cent. ref., 41s. 6d.; 7 to 8½ per cent. ref., 42s. 6d.; 6 to 5½ per cent. ref., 45s.; 3½ per cent. ref., 47s. Bombay, 53½ to 47½ per cent. refraction, 34s.; 35½ per cent. refraction, 33s. Private sales have been effected for 500 tons, distant sailing, at 42s., and 150 tons, on the spot, at 42s., for 12 per cent. ref. There has been a liberal delivery during the week, the stock on hand being 3524 tons, against 4974 tons at same time last year.

At Redruth Ticketing, on Thursday, 3628 tons of ore were sold, realising 21,237*l.* 19s. 6d. The particulars of the sale were—Average standard, 127*l.* 7s.; average produce, 6¾; average price, 5*l.* 17s.; quantity of fine copper, 245 tons 3 cwts. The particulars of the sales during the past month have been:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Aug. 12	4539	£126 2	6½	£5 8 0	£33 11
„ 19	4361	128 1	6¼	5 6 0	34 12
„ 26	2719	128 4	6⅝	6 0 0	37 18
Sept. 2	3132	124 17	7⅛	6 8 0	37 9
„ 9	3628	127 7	6¾	5 17 0	36 12

Compared with last week's sale the advance has been, in the standard, 16s. 1d.; and in the price per ton of ore, 1s. 1d. Compared with the corresponding sale of last month the advance has been in the standard, 2*l.* 0s. 4d.; and in the price per ton of ore, 2s. 8d.

The arrivals at Swansea include—From Santander, 135 tons of copper ore; from Redon, 118 tons of copper ore; from Huasco, 317 tons of copper regulus; and from Caldera, 360 tons of copper ore.

At South Wheal Frances meeting, on Monday, the accounts showed—Mine cost, June, 102*6l.* 17s. 2d.; July, 141*1l.* 11s. 1d.; merchants' bills, 62*2l.* 3s. 7d.; dues, 39*6l.* 3s. 6d.; half-year's property tax, 24*9l.* 3s. 8d.=3705*l.* 19s.—Balance last audit, 913*7l.* 11s. 6d.; ore sold, 5839*l.* 8s.; tin sold, 103*7l.* 4s. 8d.; property tax on dues, 32*2l.* 1s. 4d.: leaving balance, being profit on the two months' working, 226*8l.* 15s. A dividend of 198*4l.* (4*l.* per share) was declared, and 119*8l.* 6s. 6d. carried to credit of next account. Capts. Pascoe, Prisk, and Bennetts reported that in the 154, 34½ fms. west of Broad's cross-cut, on the new north lode, the lode is 1½ ft. wide, composed of quartz and peach, with occasional stones of yellow copper ore, a very promising lode. The tribute department is looking much as usual, several of the pitches working at a low tribute.

At Grambler and St. Aubyn Mine meeting, on Tuesday, the accounts showed—Balance last audit, 111*l.* 11s.; ore and tinstuff sold, June and July, 1369*l.* 8s. 1d. =1480*l.* 16s. 1d.—Labour cost, June and July, 753*l.* 7s. 2d.; merchants' bills, 113*l.* 16s. 7d.: leaving balance in favour of mine, 613*l.* 12s. 4d. The profit on the two months' working was 362*l.* 1s. 4d. A dividend of 486*l.* (2*l.* per share) was declared, and 127*l.* 12s. carried to credit of next account.

At Boscean Mine meeting, on Sept. 3, the accounts showed—Balance last audit, 1610*l.* 2s. 11d.; tin undercharged last account, 13*l.* 3s. 3d.; tin sold (34 tons 15 cwts. 3 qrs., at prices varying from 70*l.* to 70*l.* 15s.), 3645*l.* 11s. 5d.= 5268*l.* 7s. 7d.—Mine cost, April, 901*l.* 12s. 2d.; ditto, May, 811*l.* 7s. 2d.; ditto, June, 866*l.* 11s. 10d.; merchants' bills, 502*l.* 7s. 5d.; coals, 203*l.* 18s. 8d.; dues on tin sold, 142*l.* 4s. 10d.: leaving balance in favour of mine, 1903*l.* 6s. 6d. A dividend of 240*l.* (1*l.* per share) was declared, and 1663*l.* 6s. 6d. carried to credit of next account. Capts. J. Carthew, R. Berryman, and J. Trezise reported that the 60 fm. level, east of York's shaft, is being driven on the north lode, and they expect to cut the guide in this end soon. The stopes are without alteration. In the old mine they are sinking South Boscean shaft from the surface to the deep adit level. On the whole, the mine has much improved since last reported.

At Copper Hill Mine meeting, on Wednesday, the accounts showed—Balance last audit, 334*l.* 12s. 1d.; labour cost, July and Aug., 871*l.* 8s. 2d.; merchants' bills, 347*l.* 11s. 9d.=1553*l.* 12s.—Calls received, 768*l.*; copper ores and tinstuff sold, 412*l.* 3s. 1d.; sundry credits, 6*l.* 2s. 5d.: leaving balance against mine, 317*l.* 6s. 6d.

At the Exmouth Mine meeting, on Aug. 31 (Mr. Wm. Porter in the chair), the accounts showed:—Balance last audit, 2743*l.* 2s. 8d.; ore sold, 2138*l.* 19s. 10d. =4882*l.* 2s. 6d.—Mine costs, April 12 to June 12, 2093*l.* 15s. 2d.; merchants' bills, 236*l.* 9s. 9d.; dues, 154*l.* 12s.; sundries, 140*l.* 17s. 3d.: leaving balance in favour of mine, 2186*l.* 8s. 4d. Capts. Skewis, Nicholls, and Rodda reported on the mine. They have 18 tutwork bargains, which are being worked by fifty-two men, driving, rising, and sinking, for the developement of the mine. The tribute department consists of 24 pitches, which are being worked by sixty-seven men, at tributes varying from 2*l.* 5s. to 5*l.* per ton, and yielding fair quantities of ore. Total number of men, boys, and girls, employed in the mine, 252. The committee of management having been re-elected, a vote of thanks to the Chairman terminated the proceedings.

At Penhaldarva Mine meeting, on Aug. 19, the accounts showed a balance against mine of 58*l.* 18s. 11d. Capts. W. Richards and J. Basset reported very favourably of the present appearance of the mine. The shaft has been sunk more than 20 fms. under adit, and the 10 and 20 have been driven north and south for a considerable distance; 20 tons of lead ore are ready for sampling. A special report has also been made by Capt. J. Champion (of Cargoll Mine), from which the following is extracted:—The engine-shaft is sunk below the 20 fm. level 3 fms. 2 ft., and the lode at the shaft is from 2½ to 3½ ft. wide, containing soft spar, mundic, and spots of lead, underlying east; I have no doubt before the shaft is sunk to the 30 you will have a good bunch of lead. The 20 is driven north 30 fms. The 10 is driven south 20 fms., the lode being from 2 to 3 ft. wide, and will produce some good stones of silver-lead ore and jack. The 10 is silver-lead ore per fm.; the same level has been driven south 30 fms., and the lode is now producing good spots of ore. Nicholl's winze is sunk 6 fms. 4 ft. below the 10, and will produce 2 to 3 cwts. of ore per fm. Tregiais winze is 12 fms. north of Nicholl's winze, and is sunk 18 ft. under the 10, producing 1 ton of lead ore per fm. The stopes north and south of Vigur's winze will turn out 8 cwts. of ore per fm. There is no doubt but that it will be a good mine in depth, from the present indications of the lode. All the operations are going on satisfactorily.

At Wheal Frank Mills meeting, on August 31 (Mr. W. Porter in the chair), the accounts showed—Balance last audit, 581*l.* 17s. 9d.; mine cost from May 15 to July 11, 1085*l.* 14s. 1d.; merchants' bills, 124*l.* 16s. 6d.; dues, 73*l.* 1s. 4d.; rent and sundries, 65*l.* 10s. 3d.=1930*l.* 19s. 11d.—Calls, 442*l.* 10s. 6d.; ores sold, 903*l.* 3s. 4d.: leaving balance against mine, 585*l.* 6s. 1d. A call of 1s. 6d. per share was made. Capts. Nicholls and Cornish reported that in the mine 14 pitches were being worked, at tributes varying from 2*l.* to 6*l.* per ton, these pitches varying in yield from ¼ to 1 ton per fm. The total amount of ground driven during the two months had been 103 fms. 3 ft., and 44 fms. stoped. The quantity of ore sold since the commencement in 1856 has been 762 tons 15 cwts., the amount realised being 8640*l.* 6s. 4d. The number of men employed on the mine is 97, with 12 boys and 10 girls.

At Drake Walls Mine meeting, on Thursday (Mr. W. Little in the chair), the accounts showed—Mine cost, April, May, and June, 3896*l.* 10s. 9d.; rent of watercourse, and sundries, 82*l.* 16s. 2d.=3979*l.* 6s. 11d.—Tin sold, 3445*l.* 1s. 5d.; arsenic account, 86*l.* 13s. 8d.; difference in the estimated value of tin ores, 11*l.* 8s. 5d.: leaving balance against the mine, 436*l.* 3s. 5d. A call of 1s. per share was made. Upon the question of the election of directors coming before the meeting, a most noisy dispute arose between Messrs. Hodgson and Betteley, in the midst of which the more peaceable shareholders left the room, and no election took place.

At Wheal Polmear meeting, on Sept. 2 (Mr. H. W. Higman in the chair), the accounts showed—Mine costs, March, April, and May, 194*l.* 17s. 3d.; ditto, June and July, 135*l.* 19s. 3d.; merchants' bills to end of July, 78*l.* 0s. 6d.; dues on ores sold, March, 11*l.* 17s. 3d.=440*l.* 14s. 3d.—Balance last audit, 131*l.* 10s. 2d.; ores sold, 220*l.* 0s. 4d.; carriage, &c., 6*l.* 5s. 6d.: leaving balance against mine, 82*l.* 18s. 3d. A call of 2*l.* 10s. per share was made. Mr. Dalley reported that from the tribute pitch working in the back of the adit or crooked lode, 4 or 5 tons of very rich ore had been taken during the last six weeks: 30 fms. had been driven west on Ploughshare lode; the lode in the end was looking kindly, and contained some good stones of ore—there was still a tolerable lode at the back of this level; a large quantity of mundic had been found standing above and below the adit level west of the shaft; 20 tons of ore had been broken, and will be sampled in about three weeks.

At College Mines meeting, the directors were empowered to raise an additional 2000*l.*, by the issue of 8000 new shares, of 5s. each. It is stated that the returns for the last six months have nearly paid the monthly costs, and, from present appearances, there is every prospect of the mine becoming a very valuable property. It is necessary, however, for bringing the mine into a profitable state, that a further outlay should be incurred; and it is considered that a call of 1s. per share upon the new shares now authorised to be issued would be sufficient for this purpose. Should this prove insufficient, the directors will not make a further call without previously convening a meeting of the shareholders. The mines are situate near Keady, county Armagh, Ireland, and the sett comprises an area of upwards of 21,000 acres, and is held under a favourable lease, of which 29 years are unexpired, at 1-16th dues.

At West Fowey Consols meeting, on Aug. 31, the accounts showed—Balance from last audit, 172*l.* 5s.; copper ore sold, 2952*l.* 0s. 6d.: black tin, 845*l.* 6s. 2d.; dues retained towards law costs, 175*l.*; sundries, 2*l.* 2s. 8d.=4146*l.* 14s. 4d.—Mine cost, Jan., Feb., and March, 1155*l.* 10s. 9d.; ditto, April, May, and June, 1337*l.* 11s. 10d.; merchants' bills for three months ending March, 542*l.* 8s. 8d.; ditto June, 584*l.* 1s. 6d.: leaving balance in favour of mine, 527*l.* 1s. 7d. Messrs. Wm. Stephens and E. Dunstan report that the 100, east of Puckey's south shaft, on Puckey's lode, has been driven 12 fms. through good tin ground, the end being worth more than 20*l.* per fm. The rise in the back of this level is up 20 fms., 15 fms. of which has yielded 10 cwts. of tin per fm. The lode in the rise is 1½ ft. wide, yielding about 2 cwts. of tin per fathom. The winze sinking below the 80 is down 20 fms. The ground in the 100 cross-cut has improved for driving. The 120, east of Puckey's south shaft, on Puckey's south lode, is now in our sett; the lode in this end is large, but poor. The 100, east and west of Protection shaft, has been extended altogether about 25 fms. The 90 has been driven west of Protection shaft about 10 fms.; the lode in the present end is 4 ft. wide, yielding 2 tons of copper ore per fm. Deeble's shaft has been sunk about 5 fms. below the 100. The 100, west of Deeble's shaft, has been driven 14 fms.; the end is worth 15*l.* per fathom. The sinking of the winze below the 70, on Deeble's lode, has been suspended; the lode in the stopes to the west of this winze will yield 2½ tons of copper ore per fm. The surface operations are being actively proceeded with, a new steam-stamping engine-house having been set up, and the railway from the western part to the new stamps commenced.

At Prideaux Wood Mine meeting, on Aug. 31, the accounts showed—Calls, 1603*l.* 15s.; ores sold, 569*l.* 17s. 6d.; carriage, 11*l.* 8s. 11d.; sundries, 5*l.* 1s. 3d.= 2190*l.* 2s. 8d.—Balance last audit, 327*l.* 15s. 1d.; mine costs January, February, March, 519*l.* 15s. 10d.; ditto, April, May, June, 559*l.* 17s. 4d.; merchants' bills for three months, to the end of March, 87*l.* 11s. 4d.; ditto, to the end of June, 129*l.* 16s. 2d.: leaving balance in favour of mine, 565*l.* 6s. 11d. A call of 2s. per share was made. Capts. F. Gill and P. Rich reported that the lode in the 64, east of Kendall's shaft, on Kendall's lode, was 2 feet wide, containing good spots of copper ore, and of a very promising character. In the last 6 feet driving in the 54 they had discovered a good branch of tin come out from the north; the lode in the present end is 2 ft. 6 in. wide. The lode in the adit end, east of Kendall's shaft, was 5 ft. wide, worth 7*l.* per fm. for copper ore, and a great improvement was expected as they approached the junction. They had 4 tons of tin ready for market, and they hoped during the next three months to make 8 tons of it. The tribute pitches were looking favourable, and the other parts of the mine as usual.

At Redmoor Mine meeting, yesterday, the accounts showed a balance of 290*l.* against the company, and a call of 1s. per share was made. The report of the mine was very satisfactory. The returns for August, not calculated in the accounts presented, would meet the cost (172*l.*) within 30*l.*, and as the agent estimated that for the next three months he would raise from 500*l.* to 600*l.* worth of lead, it is hoped no more calls will be required. About 50 tons of copper, not included in the accounts, are at surface, and as soon as the 80 fm. level is driven under the winze, on Kelly Bray lode, several pitches will be set for copper.

At South Caradon Wheal Hooper meeting, on Thursday, a call of 2s. 6d. per share was made. The engine will go to work in about a week, and in a very short time it is expected the lode will be cut 66 fathoms deep. It was at first calculated that the 1000*l.* call made in March would have lasted till the lodes had been seen; and would but for the wise determination of the shareholders to erect a large and more expensive engine. A Cornish shareholder in South Caradon attended this meeting, and expressed his opinion, from his personal knowledge of the district, that Caradon Hooper was the best speculation in it, and to back his opinion he purchased a large interest in the mine.

At Devon Great Elizabeth general meeting, held on Thursday (Admiral Duntze in the chair), the accounts for June and July were passed, and a call of 2s. per share made. The meeting was made special, for the purpose of altering a clause in the rules and regulations of the company. The captain's report appears in another column.

At Huckworthy Bridge Mine meeting, on Aug. 25 (Mr. C. H. Daw in the chair), the accounts showed—Balance last audit, 37*l.* 2s. 4d.; mine costs, April, May, and June, 149*l.* 17s.; merchants' bills, 18*l.* 3s. 7d.; sundries, 22*l.* 19s. 9d. = 228*l.* 2s. 8d.—Calls, 143*l.* 7s. 6d.; sale of materials, 50*l.*: leaving balance against mine, 34*l.* 15s. 2d. The estimated statement of assets and liabilities showed a balance against the mine of 619*l.* 4s. 10d. A call of 1s. per share was made. Capt. Key reported that Hitchins's engine-shaft was down 3 to 4 fms. under the adit level. The lode in the shaft was 6 ft. wide, carrying some beautiful specimens of rich yellow copper ore. The water in the shaft was easy, and the ground favourable for sinking. The committee having been re-elected, a vote of thanks to the Chairman terminated the proceedings.

At Camborne Vean and Wheal Francis Mining Company meeting, on Sept. 4 (Mr. W. H. M. Blews in the chair), the accounts showed a balance against the adventurers of 2342*l.* 9s. 7d. A *pro rata* call was made. The proceedings terminated with a vote of thanks to the Cnairman.

At the Oola Silver-Lead Mine special meeting, on Tuesday (Mr. C. Smith in the chair), it was unanimously resolved that Mr. G. F. Eland should be appointed liquidator, in order to realise the property and discharge the liabilities incurred by the company, and to receive the same remuneration as if a solicitor were employed.

The winding-up of Wheal Tallack is proceeding satisfactorily. It is anticipated that, so soon as the accounts are liquidated, a new company, comprising an influential section of the old shareholders, will purchase the property, with a view of energetically working the mine in order to develope its capabilities, which hitherto, through want of union and deficiency of capital, have been allowed to be neglected.

A petition for winding-up the Calcot Hall Mining Company (limited), by the Court of Bankruptcy, is to be heard on Sept. 29.

At the Court of Bankruptcy, on Wednesday, in the matter of Powell and Cocke, Mr. T. C. Mundey was appointed assignee, and Messrs. Hancock and Sharp solicitors to the assignees.

The Anglo-Californian Gold Mining Company have issued a notice convening a meeting of the shareholders for Sept. 9, in order to voluntarily wind-up the company, and confirm the acts of the liquidator, pursuant to the resolutions passed at the general meeting of June 27, 1857.

Foreign Mines shares are without change. From the Wildberg Mines a report has been received that the smelting operations are being proceeded with in the most satisfactory manner; they intended sampling 200 tons of ore on Monday. The advices received by the Bon Accord Company state that the sinkings and drivings are progressing favourably, and there was every appearance of their being on the back of a large deposit of ore; the shares are quoted at ⅜ ⅝. The English and Australian Copper Company have made upwards of 1900 tons of copper during the year ending June 30, of which about 70 tons were shipped for this country; the shares are without alteration. At the Port Phillip Company's works the progress made has been highly satisfactory; the result of the six months' work with the crushing machinery being a profit of 6869*l.* 10s. 4d.; while the quantity of gold moted for the same period amounted to 234,970 ozs., yielding a profit of 6377*l.* 13s. 3d. The Clunes Company have divided during the twelve months dividends to the amount of 140*l.* per share. The report received by the Worthing Mining Company is highly encouraging. A very rich course of malleable copper, black oxide, and sulphurets, mixed with gossan and quartz, together with iron pyrites, was discovered a day or two previous to the date of the report. The quantity of ore raised during the month by tributers was about 9½ tons.

The shares of the North Rhine Copper Mining Company of South Australia have been freely dealt in throughout the week, and continue firm at ⅛ to ¼ prem.

THE COAL TRADE.

The following is a statement of the delivery of coals, &c., in the port of London during the month of August:—

	Ships.	Tons.		Ships.	Tons.
Newcastle	268	92,272	Scotch	5	868
Seaham	105	25,717	Welsh	64	17,157
Sunderland	188	65,049	Yorkshire, &c.	36	2,995
Middlesbro'	21	4737	Small	7	1,725
Hartlepool & West Hart.	204	59,605	Culm and cinders	11	943
Blyth	21	5,175			
Total				930	276,243
Total imported in August, 1857					245,759

Comparative Statement of 1857 and 1858.

Imported from Jan. 1 to Aug. 31, 1858	Ships	6,862	2,099,667 tons.
Imported from Jan. 1 to Aug. 31, 1857	„	6,722	2,009,471 „
Increase of ships and tons in present year		140	90,196

THE RAILWAY COAL TRADE.

Monthly statement of coal and coke brought by railway and canal within the London district, during the month of August:—

Railways.	Tons cwts.	Railways.	Tons cwts'
Great Northern	36,816 3	Great Western	8,679 0
London and North-Western	31,724 11	South-Western	1,641 4
Eastern Counties	5,821 17	Hertford and Welwyn	378 0
Total by railway in August, 1858			85,060 15
Coals by railway in August, 1857			91,264 16
Coals by canal in August, 1857			1,451 15

Comparative Statement of 1857 and 1858.

Coals by railway from January 1 to August 31, 1857	780,922 1
Coals by railway from January 1 to August 31, 1858	775,176 18
Decrease in the year 1858—railways	5,745 3
Coals by canal from January 1 to August 31, 1857	17,293 0
Coals by canal from January 1 to August 31, 1858	14,173 0
Decrease in the year 1858—canals	3,120 0

An account of the number of vessels and quantity of coal and coke sent to London and other ports in the United Kingdom, from the under-mentioned places, in the month of August, 1858:—

Port.	Ships.	Tons of coals.	Tons of coke.
Newcastle	952	159,219	1328
Shields	14	1,868	—
Blyth	72	12,629	—
Amble	8	782	—
Sunderland	603	125,958	6
Seaham	—	6,508	—
Hartlepool and West Hartlepool	512	100,906	36
Stockton	5	650	—
Middlesbro'	129	15,760	6
Hull	9	756	—
Goole	106	7,651	—
Grimsby	3	356	—
Swansea	220	17,538	4172 culm.
Cardiff	480	55,910	1079
Llanelly	206	24,754	—
Newport	422	40,218	586
Pembray	68	6,028	—
Troon	—	16,191	—
Ardrossan	—	2,550	—
Ayr	72	7,216	—
Irvine	—	2,648	—
Borrowstoness	48	3,158	—
Inverkeithing	8	396	—
Maryport	261	31,348	3
Whitehaven	173	16,109	87 culm.
Penclawdd	13	687	—
Charlestown	54	4,777	—
St. David's	3	170	—

—Browne's Export List.

COALS IMPORTED INTO LONDON BY PORT, RAILWAY, CANAL, AND ROAD.—From an official statement of the amount of duty of 4d. per ton on coals imported into the port of London, and by railway, canal, and road into the metropolis for the past year, just furnished by the Corporation, it appears that the amount for seaborne was 51,491*l.* 7s. 4d., representing a quantity of 3,082,482 tons; collected on Grand Junction Canal, 422*l.* 7s. 8d., or 25,343 tons; London and North-Western, 6697*l.* 11s. 4d.; or 401,854 tons; Great Northern Railway, 8855*l.* 11s., or 531,333 tons; Great Western, 1290*l.* 5s. 8d., or 77,417 tons; South-Eastern, Greenwich, and North Kent, 140*l.* 3s. 8d., or 8411 tons; Eastern Counties, 1523*l.* 9s. 4d., or 91,408 tons; London and South-Western, 231*l.* 4s. 8d., or 13,874 tons; London, Tilbury, and Southend, 4*l.* 10s. 8d., or 272 tons; London, Brighton, and South Coast, 1*l.* 5s. 4d., or 76 tons; and by road traffic, 36*l.* 6s., or 2178 tons. Total amount, 70,694*l.* 2s. 8d.; quantity, 4,241,648 tons.

RAILWAY CAPITAL AND LOANS.—The grand total amount of capital and loans for railways, authorised by Act of Parliament previous to Dec. 31, 1857, was 387,051,734*l.* of which 7,732,496*l.* was authorised to be raised by shares, and 2,614,316*l.* by loans, last year alone. Previous to the year 1857, 281,114,152*l.* was to be raised by shares, and 96,458,773*l.* by loans. Of the share capital paid up on Dec. 31 last, 178,624,394*l.* was not receiving, or entitled to receive, any preferential dividend or interest. The total amount of the dividends on the ordinary share capital of railways was 6,391,746*l.*; capital to the amount of 58,126,627*l.* received preferential interest or dividends to the amount of 2,706,157*l.* The total debts of companies at the end of 1857 amounted to 78,406,237*l.*, and the interest thereon payable to 3,240,683*l.* The total amount which, at the end of the year, the various companies had raised by shares and loans was 315,157,260*l.*, and they then retained power to raise 72,194,618*l.* by existing shares, by new shares, and by loans: 283,957,255*l.* is the total amount expended in the construction of railroad works. The length of line open for traffic on Dec. 31 last was 9447 miles (2681 of single, and 6356 miles of double mines): 993 miles of railroad were being constructed at the close of the year, and 3554 miles of line were authorised, but not then commenced. The total length of lines for which companies had obtained powers prior to Dec. 31, 1857, was 13,562 miles.

RAILWAY ACCIDENTS.—Some statistics of railway travelling lately published make the United States the most dangerous, and Prussia the safest, country for passengers on railways. In the States one in every 188,459 is injured, in Prussia one out of 3,294,075. England damages one of each 311,345; France one out of 375,092; and Belgium one in 1,611,237.

RAILWAY TRAFFIC.—The Traffic Returns of Railways in the United Kingdom for the week ending Sept. 4 amounted to 507,549*l.*, and for the corresponding week of 1857 to 517,615*l.*, showing a decrease of 10,066*l.* The gross receipts of the eight railways having their termini in the metropolis amounted for the week ending as above to 214,100*l.*, and for corresponding week of 1857 to 215,709*l.*, showing a decrease of 1609*l.*

The decrease on the London and North-Western amounted to 724*l.* But from this must be deducted 123*l.* the increase on the Eastern Counties; 176*l.* on the Great Northern; 777*l.* on the Great Western; 64*l.* on the London and Blackwall; 152*l.* on the London, Brighton, and South Coast; 26*l.* on the London and South-Western; and 256*l.* on the South-Eastern, together, 563*l.*: leaving the decrease, as above, 1609*l.*

The receipts on the other lines in the United Kingdom amounted to 293,449*l.*, and for the corresponding week of last year to 301,906*l.*, showing a decrease of 8457*l.* in the receipts of those lines, which, added to the decrease on the metropolitan lines, leaves the total decrease 10,066*l.*, as compared with the corresponding week of 1857.

TO AMERICA IN A WEEK!—The progressive amount of passengers on the Galway and Halifax line, so ably conceived and carried out by Mr. Lever, is such as completely to establish the commercial success of the undertaking, independently of the international and patriotic side of the question. Thus, six weeks ago, the *Indian Empire* took out 20 passengers; a fortnight afterwards the *Prince Albert* carried out 150; and a fortnight since, the *Pacific* left Galway with 340. The *Indian Empire* returned with 160, and the *Prince Albert* brought 257; the cargoes outward and homeward increasing even in a greater proportion—so much so, indeed, that the *Prince Albert*, which sails on the 14th instant, has already turned away cargo, and refused 150 passengers, having made up her full complement of 450. So much for the Galway and American line as a commercial speculation. Mr. Lever has already under contract the *American Empire* and the *British Empire*, each of 3000 tonnage and 1000 horse-power; with the *Antelope*, of 1500 tons and 500 horse-power, as well as the *Propeller*, to increase the strength and efficiency of his line; but it has already become apparent that the undertaking is one to which expansion is so necessary that a joint-stock company must be established for the purpose.

UNION COAL AND OIL COMPANY OF MAYSVILLE, KENTUCKY.—This company, manufacturers of cannel coal oil for illuminating and lubricating purposes, obtain their coal from their own lands on Coal River, Western Virginia. The specimen oils shown us by their agent, William R. Nichols, practical machinist, comprise four qualities of lubricating oil for different kinds of machinery, and one of burning oil for illuminating uses. Mr. Nichols informs us that he formerly pursued his mechanical vocation in this city, in the service of a locomotive builder and a railroad company; and that he has here found customers for his lubricating oils among some of the best known workers in the metals, whose commendation or certifications will do much towards inducing others to give it a fair trial; the fact that it is now used in some of the large establishments for machinery manufacture, is a strong point in its favour.—*United States Railroad and Mining Register.*

The return of the Bank of England for the week ending Wednesday, compared with the previous weekly return, showed the following results:—

Circulation issue	£31,772,280	Increase	£ 233,430
Circulation active	20,913,560	Decrease	289,260
Public deposits	7,535,733	Increase	1,907,878
Other deposits	12,267,046	Decrease	1,407,742
Government securities in banking departm't	10,955,269	Increase	41,888
Other securities in banking department	13,362,692	Decrease	90,632
Coin and bullion in both departments	18,039,465	Increase	242,269
Seven day and other bills	770,477	Decrease	19,989
The rest	3,692,610	Increase	2,638
Notes in reserve	11,758,720	Increase	522,690
Total reserve (notes and coin) in banking department	12,509,905	Increase	531,529

These changes are of considerable importance, and highly favourable, the "reserve" having increased more than half a million. For an explanation of this movement, we must look to the deposits. To a considerable extent, the alteration under the latter head is a mere matter of account, the Council of India having transferred to the British Government a very large sum, which has been for some time due, and the means of liquidating which has been furnished by the new loan recently issued. On balance, the deposits have increased half a million. The decrease in the private securities probably represents bills which arrived at maturity on the 4th. The addition of 242,269*l.* to the coin and bullion raises the total to upwards of eighteen millions. Nineteen millions will probably soon be attained.

The *Gazette* statement of the movement of the precious metals for the week ending Wednesday last gives the following totals:—Imports of gold, 429,557*l.*; exports of gold, 77,347*l.*; imports of silver, 23,382*l.*; exports of silver, 104,736*l.* The gold movement is remarkably favourable.—*Daily News.*

LEAD ORES.

Sold by the VALE OF TOWY MINE, on September 6.

Mines.	Tons.	Price per ton.	Purchasers.
No. 1	57	£13 2 6	Locke, Blackett, & Co.
2	7	12 12 0	ditto
3	9	12 1 6	ditto
4	11	8 10 0	Panther Company.

Sold on the 4th September.

Wheal Wrey Consols	37	18 15 0	Locke, Blackett, & Co.
ditto	30	8 1 0	Sims, Willyams, & Co.
South Garras	50	18 2 6	Locke, Blackett, & Co.

Sold on the 6th September.

Round Hill	45	13 7 6	Walker, Parker, & Co.

Sold on the 8th September.

Treweatha	11	25 15 6	Bibby & Sons.
ditto	17	13 1 6	Michell & Son.

Ticketing at Holywell, 9th September.

Maesyrerwddu (Talargoch)	14½	12 0 6	Newton, Keates, & Co.
Coetia Llys	15	14 2 0	Walker, Parker, & Co.
Talacre	4½	14 1 6	Adam Eyton.
Deep Level	44	12 8 0	Walker, Parker, & Co.
ditto	6	16 0 0	ditto
Holywell Level	27	14 16 0	ditto
Mount Pleasant	10	13 5 6	Adam Eyton.
ditto	10	15 17 6	Walker, Parker, & Co.
Rhosesmor	53	13 16 0	Newton, Keates, & Co.
Fronissa	7	9 15 0	Courage & Co.
Chirk Castle	29	13 2 0	Newton, Keates, & Co.

BLACK TIN.

Sold on the 31st August.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Gt. Wh. Fortune..	8 7 2 15	—	£544 16 2	—Mellanear.

Sold from 3d June to 2d September inclusive.

Boscean	54 15 3 2	—	3645 11 5—	ditto

Sold on the 4th September.

Kitty (St. Agnes)	16 0 1 13	—	950 19 6—	—

COPPER ORES.

Sampled Aug. 25, and sold at Tabb's Hotel, Redruth, Sept. 9.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Basset	78	£7 3 0	North Basset	37	£3 4 6
ditto	66	5 11 6	ditto	30	4 12 0
ditto	64	3 19 6	ditto	29	2 11 0
ditto	63	5 13 6	ditto	26	17 8 0
ditto	57	6 1 6	ditto	16	13 1 6
ditto	55	3 17 6	Great South Tolgus	75	12 11 0
ditto	48	4 17 0	ditto	56	6 11 6
ditto	36	9 11 6	ditto	44	4 11 0
ditto	33	4 7 6	ditto	43	4 16 0
ditto	32	6 15 6	Par Consols	72	8 19 6
ditto	29	3 9 6	ditto	70	10 6 6
ditto	15	4 11 0	ditto	67	10 17 6
Wheal Buller	110	3 14 6	Great Wheal Alfred	65	5 1 0
ditto	84	4 10 0	ditto	47	4 4 0
ditto	76	2 4 6	ditto	39	3 8 0
ditto	75	8 7 0	ditto	32	7 2 0
ditto	61	4 2 0	ditto	20	2 10 0
ditto	25	6 7 0	Wheal Unity Consols	72	5 3 0
Alfred Consols	57	5 15 0	ditto	50	5 14 6
ditto	42	10 16 0	West Alfred Consols	62	3 4 6
ditto	35	5 18 0	ditto	40	3 15 0
ditto	34	2 18 6	ditto	17	12 3 6
ditto	27	1 18 6	South Crenver	47	2 13 6
Nancepuska	85	5 2 6	ditto	34	6 14 6
ditto	49	11 11 6	Carrack Dews	50	2 10 6
ditto	24	1 16 0	ditto	18	12 11 6
ditto	18	3 13 6	Wheal Anna	46	5 8 6
Wheal Margery	91	3 14 6	ditto	20	2 16 0
ditto	88	3 2 0	Wheal Agar	42	11 9 6
ditto	65	10 12 6	ditto	20	5 14 6
ditto	61	4 7 6	West Fowey Consols	54	9 2 6
ditto	24	1 13 6	Tretoil	54	2 12 6
Tolvadden	68	4 10 6	Clijah and Wentworth	27	7 9 6
ditto	66	5 7 6	Treviskey Un. Mines	22	2 1 0
ditto	65	8 2 6	Rosewarne Consols	17	4 19 6
ditto	61	5 5 0	Lewis Mines	15	6 1 6
ditto	37	5 15 0	Halamanning	9	5 7 0
ditto	14	19 17 6	ditto	2	6 6 0
North Basset	59	3 5 6	West Providence	10	5 18 6
ditto	55	4 8 6			

TOTAL PRODUCE.

West Basset	576	£3204	13 6	South Crenver	81	£ 354 7 6
Wheal Buller	431	1991	19 0	Carrack Dews	68	352 12 0
Alfred Consols & Nanspusker	371	2251	8 6	Wheal Anna	66	305 11 0
Wheal Margery	329	1609	9 6	Wheal Agar	62	596 9 0
Tolvadden	311	2001	16 6	West Fowey Con.	54	492 15 0
North Basset	252	1429	9 6	Tretoil	54	141 15 0
Great South Tolgus	218	1716	1 0	Clijah and Went.	27	201 16 6
Par Consols	209	2097	11 6	Treviskey United	22	45 2 0
Great Wh. Alfred	203	935	9 0	Rosewarne Con.	17	84 11 6
Wheal Unity Con.	122	657	1 0	Lewis Mines	15	91 2 6
West Alfred Con.	119	556	18 6	Halamanning	11	60 15 0
				West Providence	10	59 5 0

Average Standard ..... £127 7 0 | Average Produce 63¾
Average Price per ton £5 17 0
Quantity of Ore ..... 3628 tons | Quantity of Fine Copper, 245 tons 3 cwts.
Amount of Money £21,237 19 6

LAST SALE.—Average Standard ..... £124 17 0.—Average Produce 7⅞
Standard of corresponding sale last month, £126 2 0.—Produce, 6½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	66	£ 367 19 0
Vivian and Sons	661½	3815 14 9
Grenfell and Sons	541	1931 8 7
Crown Copper Company	182½	890 10 11
Sims, Willyams, Nevill, and Co.	464	2014 5 11
Williams, Foster, and Co.	977	5964 17 8
Mason and Elkington	453	2553 19 8
F. Bankart	168	1306 9 0
Copper Miners' Company	178	1109 17 8
C. Lambert	21½	109 8 4
Newton, Keates, and Co.	115½	1173 8 0
Total	3628	£21,237 19 6

NO SALE on Thursday next, 16th September.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols 1953—Phœnix Mines 383—West Caradon 300—Bedford United 212—Hingston Down 210—Collacombe 181—Devon and Cornwall 150—Calstock Consols 145—Wheal Friendship 137—Wheal Edward 120—Kelly Bray 118—Gawton Copper Mine 92—West Wheal Jane 53—Wheal Franco 50—Lady Bertha 39—East Wh. Russell 38—Devon and Courtenay 35—Devon Buller 22—Virtuons Lady 20—Great Tregune 3.—Total, 4261 tons.

SECOND SALE IN SEPTEMBER.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1849	2677	8¼	£15,563 15 6	£103 16 0	£70 10 0	£79 10
1850	3106	8½	17,854 6 6	100 11 0	68 1 0	79 10
1851	2848	8½	16,081 9 0	99 1 0	66 12 0	84 0
1852	3124	6⅞	20,063 4 0	133 14 0	93 12 0	102 10
1853	3850	6⅞	24,280 3 6	132 14 0	92 8 0	107 10
1854	4447	7⅛	31,097

THE PROGRESS OF MINING IN 1857,
BEING THE FOURTEENTH ANNUAL REVIEW.

BY J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

THE FOURTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTAL SHEET to the MINING JOURNAL of Jan. 2, 1858.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6*d*. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to Investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Looking at the causes for the present depression in mining shares, Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines to pay good interest, with a probability also, of a rise in value, the names and particulars of which will be furnished on application.

THE COMPENDIUM OF BRITISH MINING, by J. Y. WATSON, F.G.S., Third Edition, is NOW in COURSE OF PUBLICATION WEEKLY, in "WATSON and CUELL'S MINING CIRCULAR," having been commenced in No. 81. This work, the first to call public attention to Cornish mining, was originally published in 1843; and the present edition has been called for by numerous subscribers to the Circular. It will contain—The General Features of a Mine, and the Mode of Working it; Names and Appearances of Lodes, &c.; with almost every particular interesting to the general reader as relating to mining operations.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30th June, 1858, with Particulars of the principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Three Years, &c., with SPECIAL REPORTS, and PLANS of UNDERGROUND WORKINGS, is NOW READY, price One Shilling, at 117, Bishopsgate-street Within, London.

Reliable information and advice will at any time be given on application.

Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

CORNISH COPPER MINING ENTERPRISE, 1850 TO 1ST MAY, 1858, INCLUSIVE.

By R. TREDINNICK, Mining Engineer and Share Dealer, 4, Austinfriars, London.

1000 copies only are published, price bound 5s. per copy. Early application, to guard against disappointment, is earnestly requested.—Communications to be addressed to the Editor of the *Mining Journal*, 26, Fleet-street, London.

Price One Shilling.

BOARD MANAGEMENT.—AN ADDRESS TO SHAREHOLDERS IN SEARCH OF A DIVIDEND, WITH SOME REMARKS ON CLUBS AS MANAGED BY COMMITTEES.

London: Stanford, 6, Charing-cross.

Just published, demy 8vo., with Twenty Illustrations on Copper, price £1 5s., an

ELEMENTARY TREATISE ON IRON METALLURGY, UP TO THE MANUFACTURE OF PUDDLED BARS:

Built upon the Atomic System of Philosophy, the Elements operated upon being Estimated according to Dr. Wollaston's Hydrogen Scale of Equivalents.

Comprising Suggestions relative to Important Improvements in the Manufacture of Iron and Steel, and the Conduct of extensive Ironworks.

WITH ANALYTICAL TABLES OF IRON-MAKING MATERIALS.

By SAMUEL BALDWYN ROGERS, of Nant-y-glo, Monmouthshire.

"I do not hesitate to say Mr. Rogers's work is the most complete combination of sound science and sound practice that has yet appeared on Iron—beyond comparison."—DAVID MUSHET. London: *Mining Journal* office, 26, Fleet-street.

EXTRACTION OF THE PRECIOUS METALS BY MEANS OF MITCHELL'S PATENTED AMALGAMATING MACHINERY.

Information respecting the above, and terms for supplying the same—both for exportation and for home use—may be obtained on application to the vendor, PERCIVAL CLAY, 37, Old Broad-street, London, E. C.

Just Published, price One Shilling,

ON THE EXTRACTION OF THE PRECIOUS METALS, by means of MITCHELL'S PATENTED AMALGAMATING MACHINERY. Also, a DESCRIPTION of the various MODES at PRESENT in USE for the TREATMENT of AURIFEROUS and ARGENTIFEROUS SUBSTANCES.

By JOHN MITCHELL, F.C.S.,
Author of *Manual of Practical Assaying, Metallurgical Papers*, &c.

To be had of PERCIVAL CLAY, 37, Old Broad-street, London, E. C.

Works published at the MINING JOURNAL *office, 26, Fleet-street, London.*

PRACTICAL TREATISE ON MINE ENGINEERING. By C. G. GREENWELL. In one vol., half-bound, £2 15s.; whole bound in Morocco, £3 10s. In two vols., half-bound, £3 3.

TREATISE ON IRON METALLURGY. By S. B. ROGERS. £1 5s.

NEW GUIDE TO THE IRON TRADE, OR MILL MANAGERS' AND STOCK-TAKERS' ASSISTANT. By JAMES ROSE. 8s. 6d.

TRANSACTIONS OF THE NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS. Five volumes: 21s. per volume.

THE COST-BOOK—TAPPING'S PRIZE ESSAY—WITH NOTES AND APPENDIX. 5s.

TAPPING'S EXPOSITION OF THE JOINT-STOCK COMPANIES ACT. 4s.

GEOLOGY AND MINING—FOUR LECTURES, by G. HENWOOD, 2s. 6d.: by post 3s.

INVENTIONS, IMPROVEMENTS, AND PRACTICE, OF A COLLIERY ENGINEER AND GENERAL MANAGER. By BENJAMIN THOMPSON. 6s.

TAPPING'S DERBYSHIRE MINING CUSTOMS. 6s.

TAPPING'S HIGH PEAK MINING CUSTOMS. 5s.

TAPPING'S EDITION OF MANLOVE'S CUSTOMS OF THE LEAD MINES OF DERBYSHIRE. 3s.

PLAN OF VENTILATING COAL MINES. By WM. HOPTON. 3s.

PROCEEDINGS OF SOUTH WALES INSTITUTE OF ENGINEERS. Part II. 2s. 6d.

Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

MINE MEETINGS.—I perfectly agree with several of your correspondents who have written upon this subject, that all meetings of companies whose shares are on the market should be open. I have some interest in several Cornish mines the management of which is held in the country. Meetings take place on the mine, and a circular some days afterwards is forwarded to me. There are many questions I may wish explained. If I write, I either receive no answer, or in general one so vague and unsatisfactory that it affords no information. The resolutions are embodied in the circular, but the reasons that caused their adoption we are not aware of in general; but a select few attend, and it is they who rule the mine. If publicity were in every instance given the true state of affairs would be known, and there would be less favour shown, and, consequently, not so many opportunities for unfair jobbing as now in several cases I could point out to your notice exist. I am convinced, if this system were carried out in its integrity, a great impetus would be given to mining enterprise, and, at the same time, an immense blow struck at mischievous speculation, which has made mineral undertakings in the West of England too often a bye word and reproach.—P. T.

FOREIGN MINING.—A correspondent alludes to the neglect of the mineral wealth of the Cape of Good Hope. Not only in Namaqualand, but in several other parts of the colony, there are large deposits of copper, lead, iron, and coal, within a few miles of each other. Mr. W. Sowerby, who some time since was attached to an East Indian geological expedition, surveyed the property, and gave a most favourable report of its capabilities. At the time he was in England it was remarked to him that capitalists were not likely to come forward here when they found so little interest attached to mining in the colony. The reason why the Australian mines have been progressive, and received in such favour here, is from the simple fact that their promoters are not speculators or adventurers, but gentlemen who are largely interested in the development of the different colonies and the increase of their material prosperity. I am not alluding here to gold mining.—BETA.

PEMBROKE AND EAST CRINNIS.—For a considerable period I have paid great attention to the reports which have come to hand from this mine; and I am sorry to see that the promises made so many months ago have not yet been fulfilled. I have the greatest confidence in the property, but I think the shareholders would be better pleased if they were informed as to the true state of things. It is much more satisfactory that the captain should understate the prospects of the mine than that he should overrate them. The general complaint of Cornish mining is that the agents are always too sanguine, and this is a failing which should be eschewed. I should now wish to enquire when we may really expect the large lode ahead sometime since spoken of? I would, however, prefer that its appearance should be deferred for six months than be told it might be expected in a few weeks, and then extended to an indefinite period. —A LOVER OF TRUTH.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—We are now nearly in the middle of September, and as yet the liquidators of this company have published no report of their proceedings, nor are we aware whether the suit pending between them and Sir Henry Huntley has been settled. It must be obvious to all parties concerned that no company can be in liquidation for fifteen months without incurring great expenses. A sum of 250*l*. was, I believe, set aside for paying the liquidators: they have expensive offices at Gresham House; the rent of these must be paid, and the creditors, if there be a deficiency, must suffer. When the directors were at the head of affairs information, whenever it was demanded, was cheerfully accorded; since, however, the liquidators have taken the affairs of the company in hand an ominous silence has been observed, and nothing is known of their movements. It would be much better to announce the company as finally defunct, than thus keep themselves together as a living corpse, lacking vitality and energy, but still preserving so much tenacity as not to expire while a single asset remains available. It was stated in July, 1857, that we ought to endeavour to avoid Chancery, if the company had, however, been wound-up by the court we should at least have known the result: as it is, we have placed ourselves in the power of a set of men equally as secret as the Venetian Council of Ten, and quite as mysterious in all their movements. Surely there must be some law to make these gentlemen render an account, and I am much surprised that many of the shareholders have not endeavoured to devise means to have a full and clear explanation of the present position of the company.—H. C.

NEWTOWNARDS MINES.—In writing you I am but doing justice to a worthy and deserving miner, a practical working man, and as good a miner as the county of Cornwall ever produced. Some years ago these mines were on the point of being abandoned, when Capt. Rickards stated that they were near a course of ore, pointing out where a cross-cut should be driven to make the discovery. It was then agreed to continue working for a fortnight longer, according to the recommendation of Capt. Rickards; and thus was found the ore which has yielded so well and produced the large profits since enjoyed by the company. At the same time, Capt. Rickards declared the unfavourable character of the adjoining mine—the Carley; gave his advice to Captain B. Mathews, and stated that it never would be worth anything. In consequence of this Capt. Mathews resigned his situation, caused the shareholders to part with the mine, and informed them that he was guided by Capt. Rickards, and that Capt. Rickards's statements were always true. Can you inform me who has since advised the company to buy the Carley Mine, and make so great an outlay? And how much money had they got to pay the same?—J. S. B.

SNAILBEACH MINES.—Probably your correspondent, "E.," would state what would be the market price of a share in those mines, and the average dividend that has been paid to the shareholders for the las five years, and the number of shareholders.—F.

SOUTH CALLINGTON MINE.—Can any of your readers inform me what has become of this mine, or who has the management? It was conducted by Dr. Serjeant, of Callington, some years since, as purser. Have the accounts been regularly audited and rendered to the shareholders? I always thought the concern a good one, having received a communication from Capt. Spargo in Sept. 9, 1850, to the following effect:—"Buy a good interest in South Callington Mine without delay. I would almost venture the shirt off my back. I know it will make a good course of ore 10 fms. deep. It is one of the prettiest lead lodes I ever cast eyes on. The shaft will pay for sinking now in sight. Keep this letter, and read it to me twelve months hence, and my life for it you will then give me many thanks for writing it." Can any one inform me if the shaft is now down to the 10, commenced eight years since, and what is the result at that point? Also whether the mine has not cost five guineas per inch sinking and driving? And whether the lode has a profitable course of ore, or only occasional stocking stones? —INQUIRER.

GOLD REDUCTION IN ENGLAND.—It may be remembered that some years since, when Mr. John Calvert, the celebrated Australian geologist, was in the zenith of his fame, he stated that considerable quantities of gold existed in the granitic rock of the United Kingdom. Unfortunately, owing to the want of faith on the part of the public, funds were not forthcoming sufficiently for him to test, commercially, the ideas he had propounded. Should any of these gold-bearing rocks contain the brown oxide, I think it would be desirable that Mr. Squire should operate upon them *en gros;* he would then, at the same time, have an opportunity of showing his own skill, and, should he discover the gold, be able to dissipate the doubts which have been expressed of the soundness of Mr. Calvert's theory.—COSMOS.

THE "GREAT EASTERN."—The Atlantic cable is now laid, and the great ship degenerated to a shilling show. I should scarcely imagine that the vessel is such a draw that the interest of the money laid out upon her will be repaid by the sight seers. It appears that the shareholders are unwilling to advance any further funds, and, I believe, there are no precedents of Government assisting private adventure. I am surprised at the supineness of the ironmasters on this question. They are greatly interested, as were these mammoth ships to become a complete success there would be a corresponding extension of their manufacture, and consequently a further development of the iron trade. I am surprised that Mr. Clare has not mooted the question in some of the sea ports of the kingdom. Liverpool, Bristol, Hull, Cardiff, and other commercial towns, surely could supply the capital now required to test this important point. I agree with your correspondent, that it will be a national disgrace if some steps are not taken in the present autumn to fit the vessel for sea. It has been stated we are not a boasting nation, but certainly if we do not fulfil what we have contemplated, our neighbours will say, and with some justice, that we have taken a job in hand we could not effect.—A BROKER.

"H."—The company is not limited; it may possibly be registered, but, situate where it is, must be subject to the Stannary laws. In all the Acts of Parliament which are framed for the governance of public companies a proviso is always inserted excepting the mineral customs and usages which have existed from time immemorial. Every mine that is limited must be so expressed, and have been duly registered.

QUARTZ ROCK REDUCTION COMPANY.—According to the report of the meeting, Mr. Squire has successfully operated upon the sample of quartz supplied him by the company. It appears, however, that it is not decided whether he is to go to California or not, though he has offered his services for that purpose, and has proferred to communicate the secret of his process in confidence to the Chairman. I find that Colonel Kennedy observed that they could come to no decision until they had heard the issue of the law proceedings, on Oct. 6. Admitting that Mr. Squire can perform all he undertakes, if longer delay takes place it will still lead to further procrastination. Starting by the commencement of November, the probability is that by the time he is prepared to work the rainy season will be over, and consequently he will not be able to commence operations for a considerable period. Gold mining shareholders must remember what a fine stalking-horse the absence of water was to nearly all the superintendents who were in the early period of the mania sent to California. That and the breaking of machinery caused nearly all the stoppages which led to the expenditure of the money of the unfortunate subscribers to these delusions. I see no reason why we should await the result of the law proceedings. Let Mr. Squire be at once dispatched to the remnant of our works. He states that he can return the capital in eighteen months. We cannot be much worse off than we are at present, and the sooner a solution of our position is arrived at the better. At least two important questions will be decided: the one is, can Mr. Squire extract gold where others cannot? and the other, is our property so valuable as he supposes? Should the latter not be the case, the sooner it is abandoned the more satisfactory, I am convinced, it will be to many of the shareholders.—CLERICUS.

IMPROVEMENTS IN COAL MINING.—The next paper "On the Introduction of the Tub Cage, and Guide-Rod System," will appear in our next Journal.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, SEPTEMBER 11, 1858.

The Coal Mines of Great Britain have been under official inspection for eight years. During this period the Government has shown every disposition to render it efficient. When complaint was made that the number of Inspectors was insufficient to accomplish the contemplated objects, and that the salaries were too low to secure the services of competent men, the Secretary of State increased the number of Inspectors, and augmented their salaries. So far, then, the Government has shown every disposition to carry out the provisions of the Acts of Parliament in a fair and proper manner. The country has been divided into districts, and an Inspector assigned to each. Since these last arrangements no Inspector has complained that his district was too extensive, or that his remuneration was disproportionate to the market value of the services rendered; we may, therefore, assume that they are all well contented with things as they are.

The inspection of mines was not a measure easily obtained; it was not until after a struggle of many years, and after encountering the opposition of a most determined and powerful body, that it was at last wrung from a reluctant and timid Government. Deeply sensible of the absolute necessity there was for it, we never hesitated as to the course to be pursued, but perseveringly and unflinchingly advocated the right of the poor collier to legislative protection. We freely opened our columns to correspondents for the discussion of the subject; and, although our opinions were well-known to be unequivocally in favour of the measure, we gave free scope to the insertion of articles opposed to our views, and it is a source of no ordinary gratification, that during that important and protracted struggle we have the consciousness that our impartiality was never questioned. Our efforts were materially aided by the able contributions of many of our correspondents,—whose names are familiar to the readers of the Journal at that period,—whose intimate practical knowledge, scientific acquirements, and professional eminence, did much to enlist public opinion in favour of the measure. To Mr. MATHER (of South Shields), Mr. DUNN (of Newcastle), Mr. RICHARDSON (of Neath), and other occasional contributors, the colliers are greatly indebted, not only for the first Act of Parliament, but also for many of the subsequent improvements in the system of inspection. These acknowledgements are due to these unflinching advocates of humanity, the more so as such a course was prejudicial to the interests of some of them, and their exertions necessarily involved a great sacrifice.

The battle having been fought and won, it now remains with the friends of the cause to take care that the victory is not a barren one; that the law is administered in its integrity; and that all the benefits which it is capable of conferring on the working miner are exacted from its administrators. As we have already said, the Inspectors are now well paid, and are not over-worked; we have a right, therefore, to expect that their duties should be well and ably discharged.

This expectation is fair and reasonable, and there is no cause why it should not be realised. An experience of eight years in the working of the Acts gives ample time for Inspectors, even at first incompetent, to acquire the requisite knowledge, and to enable them to visit, and re-visit, every colliery in Great Britain. Yet it is unhappily notorious that a very great many collieries have never been officially inspected at all. How long, we ask, is this to be tolerated? Inspection was sought for, and obtained, for the purpose of preventing accidents; whilst the Inspectors act as if they thought their duties consisted chiefly in investigating the causes of accidents after they had happened. It is but a very small satisfaction to the weeping widows and orphans to be told that the case has been duly investigated; that the deaths of the husbands and fathers were accidental, but that the conduct of the manager was very censurable! So it was before the Inspection Acts, and so it remains; and it is for the public to say whether it shall be so in future. Several cases illustrative of our argument have recently occurred; but we shall content ourselves by referring to a loss of six lives which has recently occurred in the Swansea Valley, by an explosion in the Cyfing Colliery. In their evidence to the coroner's jury, both Mr. EVANS and Mr. BROUGH stated that the ventilation of the colliery was in a bad and very dangerous condition, and that it might easily be rendered perfectly safe. Now, we ask how it was that men were allowed to work in such a colliery in Mr. EVANS's district? In reply to an enquiry to that effect, Mr. EVANS is reported to have said that he had never inspected the colliery before the occurrence of the explosion. Here, then, is a colliery which the Inspector states to be in a highly dangerous state, and which may easily be rendered safe, and yet no inspection of it takes place until after an explosion occurs. Had it been inspected, as it ought to have been, the occurrence of this accident would have been, or, at all events, ought to have been, rendered impossible. However censurable the manager of the colliery may be, we fear the chief responsibility rests elsewhere. This is a very serious case, and we regret to say it is not a solitary one, as similar instances have frequently occurred in other districts. We have no wish to press hardly upon Mr. EVANS, and adduce this explosion and neglect of previous inspection only because it is the most recent. We have been slow to animadvert on these deplorable incidents, in the hope that each recurring case would be the last; but "still another and another comes," and there is no knowing when we shall see the end of them.

It is evident that such a state of things cannot be permitted to continue. The main object of inspection is defeated, and the Act is rendered useless as a safeguard of the lives of the miners. If the Inspectors are still overtasked—if they have more collieries to overlook than they can possibly attend to, why do they not manfully say so, so that a remedy may be speedily applied? In the case alluded to, as well as in other instances, it is obvious that the administration of the Act is "a delusion and a snare;" whilst all hope of a diminution in the loss of life will end in disappointment, unless a radical change be made in the mode of inspecting coal mines.

It is in the recollection of all that when the project of a School of Mines was first mooted, some years since, that it was looked upon with distaste by some, regarded with suspicion by others, and in the greatest metallic mineral district of England the munificent offer of a resident proprietor was most uncourteously rejected. It was supposed that educated persons would be too theoretical in their ideas, and that all practice would be ignored—in fact, that science would dominate, and supersede the rule of thumb which then flourished, and still retains a great sway. The attention of the Government was called to this anomalous state of things. It was shown that while the authorities of Prussia, Saxony, France, Norway, Sweden, and even Spain, took some cognizance of the mineral productions of their several countries, yet that England, which supplied many of these states with the metals they required, had no recognised system. It was not accurately known what was the mineral production of the British Isles; statistical writers estimated it according to Custom House returns, whenever they could obtain them, and the deficiency or excess of the one year over the other was supplied by that most fertile source of the human mind—imagination. Notwithstanding the prejudices to be overcome, and the supposed questionable utility of the project, from the Museum of Economic Geology, in an obscure corner near Charing-cross, arose the present educational establishment in Jermyn-street. We are not now about to allude to the use to which it has been applied for the purposes of education; this we have previously dilated upon, and shall refer to it at a fitting opportunity. Attached to this is a modest office, but little known, called that of the Mining Record, under the careful superintendence of Mr. ROBERT HUNT; the province of this useful department is, among other duties, to obtain records and plans of mines abandoned; and those who are about to take old setts under new names would spare themselves much vexation, time, and probably capital, if they were to consult this useful bureau.

Until within the last few years the value of the annual mineral wealth of the United Kingdom could not be arrived at; the sources from which information was sought to be gained were, in too many instances, not reliable, and where an approximation of the truth was likely to be obtained, it was liable to suspicion, from the fact that it might be received from interested sources. This evil is, however, remedied, and a correct estimation can now be arrived at of the mineral wealth of Great Britain, and of this we have ample confirmation in a volume just issued by the Board of Trade, entitled *Miscellaneous Statistics;* among other matters, this affords an account of the mineral productions for the years 1854, 1855, and 1856, furnished from the Mining Record Office, of which we subjoin a summary:—

Minerals and Metals.	Quantities produced.			Estimated value at the place of production.		
	1854.	1855.	1856.	1854.	1855.	1856.
Coals.....Tons	64,661,401	61,453,079	66,445,450	£16,165,350	£16,113,267	£16,660,86[illegible]
Fine copper	19,899	21,294	24,257	2,487,375	3,042,877	2,960,0[illegible]
Pig-iron	3,069,838	3,218,154	3,586,377	12,279,325	12,872,616	14,345,50[illegible]
Metallic lead ..	64,095	65,529	73,129	1,497,717	1,516,996	1,755,09[illegible]
White tin	5,974	6,000	6,177	690,000	720,000	823,6[illegible]
	Ounces.	Ounces.	Ounces.			
Silver from lead.	558,659	561,906	614,180	140,664	140,476	153,4[illegible]

In addition to this, there is a vast deal of information supplied from the same source; by which we learn that during the three years of 1854, 1855, and 1856, the number of collieries respectively in England was 1704, 1881, 2007—the quantity of coals in tons being 47,421,651, 47,305,189, 49,043,215. In 1856 there were 395 collieries in North and South Wales, producing 9,965,600 tons; out of this, however, North Wales only returned 1,046,500 tons; in Scotland, the produce of 495 collieries was 7,500,000 tons; while, in Ireland, that from 22 was 136,[illegible] tons—the two greatest coal-producing districts of the United Kingdom being Northumberland, Durham, and Lancashire. With regard to iron, we find that in England and Wales the quantity of ore raised in 1855 was 7,150,925; while in 1856 it was 8,291,620 tons; the estimated value for the United Kingdom being 5,695,815*l*. The pig-iron made in 1856 in England and Wales was 2,705,877 tons; that in Scotland only being 880,500 tons. The number of tons of copper ore raised in 1856 was 214,356; that in the year 1854 being only 188,393; the quantity of fine copper respectively produced being 14,078 tons in 1856, against 12,250 in 1854. In the Isle of Man there was raised, in 1856, 31 tons of copper ore, returning 2 tons of fine copper; while in the same year Cornwall gave 164,153 tons, yielding a produce of 10,731 tons fine copper; in 1856, in Ireland 11,590 tons were sold, producing 11[illegible] tons of fine copper, the estimated value of this being 141,942*l*.; in addition to this, in the same year, from sundry districts, 135,375 tons of ore were obtained, producing 9025 tons of pure copper, realising 1,110,075*l*.; this was sold by private contract, and, it must be borne in mind, was all produced from British ores. The number of copper mines in Cornwall in 1856 was 135—the total in England and Wales, including of Cornwall, being 176; those in Ireland were 11. In 1854 there were 205 lead mines in England, in 1856 there remained but 198. The quantity of ore raised in 1854 was 64,796 tons, which produced 44,986 tons of metallic lead. In 1856 the lead ore sold was 64,325 tons, the produce of this, however, showed a result of 52,746 tons, thereby inferring that either an improved mode of dressing had been instituted, or that the percentage of some of the ores had greatly improved.

In Wales a like progression has taken place; the county of Cardigan has produced the largest quantity of lead ore, standing almost in the same position to the rest of Wales as Cornwall does in the production of copper to the other mineral districts of the United Kingdom. In the same year the Isle of Man produced 3217 tons of ore, yielding 2450 tons of metallic lead; Scotland gave 1931 tons of ore, returning 1416 tons of metal; while Ireland, with seven mines, raised 2483 tons of ore, which gave 1601 tons of metallic lead. The silver obtained in 1856 was from English mines (of which Cornwall furnished 248,436 ozs., and Devon 77,456 ozs.) 481,909 ozs.; from Wales 62,357 ozs.; Isle of Man, 60,382 ozs.; Scotland, 5282 ozs.; Ireland, 3700 ozs. and from sundry districts, 550 ozs. The tin ore produced in Cornwall and Devon in 1856 was, in the former county, 9114 tons; in the latter, 236 making a total of 9350 tons, yielding 6177 tons of white tin; no other counties yielding that mineral.

From the brief digest which we have laid before our readers, they will be enabled to estimate the importance of the further development of our mineral resources, and at the same time they cannot but appreciate the industry and labour which has been employed in the collection and compilation of these most useful statistics. These clearly point out our pre-eminent position as a mineral-producing country. The table shows that in production we are progressing gradually; and by the diffusion of knowledge, and the application of the allied sciences to mining, we may hope to be, as we have hitherto been, the most practical people in the world. We shall be enabled to avail ourselves of all that is useful in theory, without encouraging any of its trivialities. Mining has now become a legitimate profession; the ignorant bal captain and the pseudo peripatetic professor shall

their vocations are about to cease; the Record Office is established; and the period will soon arrive when interested knaves can no longer bring forward mines on the faith of old women's stories, to gull cunning cockneys and unsuspecting provincials. The publication of all matters connected with mining and our mineral wealth, although it may be considered as an evil by some, must be regarded by those who have true legitimate mining enterprise at heart as a benefit to one and all.

The success which has attended the laying of the ATLANTIC CABLE, has operated as a stimulus to the formation of other companies for laying down submarine lines, not perhaps of so gigantic a character in relation to any single continuous length of cable which they may lay, as in the ultimate extent of their projects. It may, however, be a matter of doubt whether a sufficient amount of experience has yet been acquired in the working of these very extensive lines to warrant the hasty adoption of any one of the present forms of cable. Difficulties not met with in freely insulated atmospheric lines, soon manifested themselves when submerged insulated conductors were employed, and these difficulties increased with their length. It happened, however, that previously to the construction of the Atlantic cable, certain modification in the manipulation with the ordinary instruments were sufficient, for practical purposes, to meet and obviated these difficulties, but when the line became extended to an unprecedented length, as in the case of the Atlantic cable, these difficulties increased, and baffled the skill of the electricians. Before any results could be obtained, or a sufficient number of experiments made, which could indicate with certainty the course to be pursued, in order to get over this difficulty, the Atlantic cable has broken down as a telegraphic communication, and we are still left to speculate with insufficient data to guide us. If it had remained perfect but a few months, it would, doubtless, have afforded an opportunity for a systematic course of experiments, which might have determined the relation between the effects due to the battery current and those due to the static charge, commonly known as the inductive charge. These two classes of phenomena being once separated, and their individual character and value ascertained, the means of overcoming the present difficulties might have been more easily determined, and the difference of opinion as to the best size of a conductor, relatively to its length, would have been removed. The attention, however, of telegraph engineers, and experimental electricians, is now being directed to the improvement of the telegraph cable itself, so as to render it a more efficient conductor, and at the same time less liable to the disturbing effects of induction. A patent has been taken out for this purpose, by Mr. J. N. HEARDER, of Plymouth, a gentleman whose electrical researches are well known to the scientific world, and whose experience as a practical electrician seems to inspire confidence in the success of his plans; the specification of his patent appears in full in the *Mechanics' Magazine*, Sept. 4, but as it amounts almost to an essay on the *rationale* of induction in cables, it cannot be inserted here. His scientific reasoning, however, is sound, his deductions quite fair, and his contrivances simple and efficient. In addition to a greatly diminished susceptibility to the influence of inductive action, his form of cable appears to embrace the advantages of lightness, strength, and any required conducting capability. Experience, however, the great teacher in practical matters, alone must decide how far theory and practice will here go hand in hand. There appears nothing objectionable in the plan, but, on the contrary, it seems to commend itself on many accounts, and, if successful, cannot but be looked upon as a vast improvement upon the ordinary form of cable. It is much to be desired that the charactor of this inductive action should be systematically examined; it is almost the only remaining difficulty to be contended with, and this once removed, the transmission of signals through long submarine lines would be as easy and rapid as in atmospheric lines.

ENGLISH AND AMERICAN COAL—COAL-BURNING LOCOMOTIVES.

The fallacy of the opinion that there is no greater economy in employing raw coal for generating steam than in using coke has now been made apparent, and, doubtless, the untiring researches of Messrs. Colburn and Holley will cause the adoption of coal-burning locomotives to become general both in this country and the United States. It was formerly held that the coke made from a given quantity of coal had all the heating power due to that quantity in its original state, but the heat given off while the coking operation is going on is now considered ample to disprove such a statement. The coals burned in English locomotives smoke freely in ordinary grates, and they are comparatively free from the sand and mineral oxides forming clinker. The stronger coals cake readily; the Welsh burn with less crust.

The United States is peculiarly a bituminous coal country. The anthracite coal field of Pennsylvania has an area of 437 square miles, whilst the bituminous coal fields of the entire country are over 150,000 square miles in extent. Ohio alone, which is the fifth in rank as a coal-bearing state, contains more of that fuel than all Great Britain. The bituminous coal of America is deposited in fields of greater or less extent from the great basin of Nova Scotia on the east, to the upper part of California and to Washington territory on the west; while it also ranges from Michigan on the north, to central Alabama and central Texas on the south. At all points where anthracite and bituminous coal compete at equal prices, the latter is to be preferred for locomotive purposes—a higher rate of evaporation can be obtained, it is easily ignited, can be burned in proper furnaces without smoke, and will injure the boiler but little more than wood. Coals are of very diverse characteristics, quite irrespective of the general distinctions of anthracite and bituminous quality. Coals of identical appearance are often very dissimilar in their constitution; in several instances in England, coal which had been rejected from market on account of its appearance, was found by careful tests, and by the subsequent general use, to be of very superior quality.

Coals vary in evaporative power, in their weight for a given bulk, in the amount of flame developed, in their chemical constitution, in ignitability, in their completeness of combustion, in the intensity or diffusibility of their heat, in humidity, in their combination of sulphur and consequent liability to spontaneous combustion, in their condition when burning, whether cracking into angular fragments, swelling and rounding at the angles, or swelling and cohering in the form of crust, and in other particulars. The most approved mode of determining the character and value of coals is that adopted by Prof. W. R. Johnson upon his appointment to test the coals competing for the supply of the United States Steam Navy. Fyfe, Shaufhautl, Parkes, Manby, and others, had already investigated the qualities of coals by burning them directly under steam-boilers upon a practical scale, and Prof. Johnson employed a return-flue boiler 30 feet long, 3½ ft. in diameter, with two 10 in. flues. The grate was 5 feet long, and 3 ft. 3 in. wide, containing 5½ square feet of air space. Every requisite appliance was provided, the temperature and volume of both the air and the water were carefully obtained. The charges of coal were timed, the tests being continued regularly each throughout a full day, and all the residuary matter being carefully collected and weighed. These examinations must be generally beneficial, not only from their furnishing a guide for the selection of the several coals according to the purposes for which they are intended, but also from their being calculated to disclose superior varieties but little, if at all, known.

THE IRON TRADE IN FRANCE.—The French ironmasters appear as dissatisfied as ever with the more liberal measures of Louis Napoleon, attributing all their distress to the fact of foreign iron being admitted into France at lower duties than formerly. The inhabitants and workmen of Givors, in a petition to the Emperor, point out the deplorable consequences to the metallurgical industry of France. Of the three establishments which existed in that town two have already closed, 1500 or 1800 being thereby thrown out of employment. The Prefect of the Loire states that in the basin of the Rhone and Loire 15 out of the 32 furnaces are no longer in operation, and that the production of iron, which in that district was, in 1856, 444,000 tons, was last year only 64,000 tons; whilst the consumption of coal fell off two-thirds. The Prefect of Avignon also said, that in his department the ironworks have had to diminish largely their operations, and to discharge numbers of their men; and he said the same thing of their coal pits. On the whole, it appears there are 4000 men out of employ, and that a great number of others are working at reduced wages, or short time. The Prefect of the Moselle, on his part, gave a better account of the iron trade in his department. At present 326 works are in operation there, and in the first half of the present year they produced upwards of 100,000 tons of iron. The mining districts generally are in anything but in a flourishing condition. Furnaces continue to be blown out, and operatives to be discharged. In consequence of the protective system, while Scotch iron can be delivered at Lyons for 150 frs. the ton (duty paid), and at Paris for 148 frs., French metal at Lyons is 205 frs., and in Paris 210 frs. The protection afforded to ironmasters costs the agricultural interest 100,000,000 frs. a year. the manufacturers double, and it has added 200,000,000 frs. to 300,000,000 frs. to the cost of the railways executed in France.

MINES AND MINING.

Under this title an elaborate and interesting paper, by Mr. J. R. Leifchild, A.M., is published in the last volume of the *Encyclopædia Britannica*, and contains ample details of the several modes of conducting mining operations in Great Britain, together with some facts concerning mineral veins and deposits, the rocks in which they are found, and the circumstances affecting their course and productiveness. Although strictly speaking mining is limited to large and deep excavations of metallic deposits, still the term is sometimes improperly applied to the washing of alluvial deposits, such as those in which gold is frequently found. In Cornwall alluvial tin occurs near the surface. Collecting the tin from these deposits is called streaming for tin, because the covering gravel, or other matter, is cast upon an inclined plane, over which a fall or stream of water is carried, and the whole mass is agitated, so that the heavier tin stones remain upon the inclined plane, while the lighter stones and earth are washed away. Tin stream-works are now chiefly conducted by poor persons for small gains. The ironstone beds of the coal measures are extensive and valuable; they supply the greater portion of the iron produced in Great Britain, the remainder being chiefly furnished by the beds and veins of hematite in the rich deposits of Lancashire, Cumberland, Durham, the Forest of Dean, Derbyshire, Somersetshire, and South Wales. The beds at Ulverstone, Whitehaven, and the Forest of Dean are more extensively worked than any of the others, and appear to be inexhaustible. The older works of Devon and Cornwall likewise contain many veins of black hematite, and the brown hematites of the North of England also merit particular attention: they contain from 20 to 40 per cent. of iron, and are found associated in large masses with the lead veins of the lead mining country; but occasionally they are seen in distinct and regular beds. They exist as riders to the vein, but sometimes they compose its entire mass, and then attain a width of 20, 30, or even 50 yards. Scientific mining is almost entirely confined to the exploration of mineral veins. It is not a work of difficulty or science to lay open and remove minerals deposited either in alluvial deposits, or in regular and massive beds; but it requires much skill, patience, experience, and capital to explore an important lode of copper, tin, or lead.

Mr. Leifchild carefully describes, or explains, as the case may be, veins, shafts, and levels, miners' tools, winzes, pitches, stopes, ventilation, mode of raising minerals, drainage, and then states the cost of materials, &c. The total quantity of timber in use for mining purposes in Cornwall would require no less than 140 square miles of forest of Norwegian pine, averaging a growth of 120 years. Taking a very speculative year (1836), the consumption of timber for mines was estimated at 36,200 loads, or 144,800 trees. The cost of timber imported the same year was 176,000*l.*, the drawback in the duties of which amounted to nearly 82,000*l.* The cost of timber for the Devon and Cornwall mines in that year amounted to 94,138*l.* In 1837 the loads were 14,056, and the cost 36,545*l.* Referring to the man-machine, he remarks that it is one of the most signal alleviations of the miners' toil which has ever been invented or applied. It ought to be generally adopted, as there is no valid objection on the ground of expense. In Cornwall, the loss of time weekly sustained by workmen in descending and ascending ladders is estimated at 3s., and the loss by man-machines at 9d. They are now in very general use in the mines of France, Belgium, and Germany; and it has been shown that the saving even in money by the use of these machines is considerable. Thus, in a mine where 250 men descend and ascend a shaft of 150 fms., the cost per annum is comparatively—Ascent and descent by ladders, 3159*l.*; by man-machines, 639*l.* An engineer has shown how 10,000 miners might, by adopting these machines, save no less than 39,000*l.* per annum in the value of time alone. The position, produce, and other particulars relating to gold, silver, platina, mercury, copper, tin, lead, iron, zinc, arsenic, and antimony mines, are then given, and the paper is concluded by a general view of the mineral wealth and produce of the principal countries of Europe.

This article has evidently been the fruit of great research and judgment. The article which it supersedes, in the former edition of the *Encyclopædia*, was quite below the mark. In the present article the author has comprised within moderate limits a scientific and statistical view of all the chief mining districts, and their mining features and produce up to recent periods; it is, we believe, the only paper in the language presenting such facts at one view, intelligibly, consecutively, and correctly.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT]

SEPT. 9.—The Coal Trade remains in the same position as formerly reported, no change of importance having taken place in the demand for coal or coke.

Another blast-furnace was lighted at Jarrow Iron-Works last week, making three furnaces now in operation at those works.

The collieries of Messrs. Carr, sold lately, were conveyed to the purchasers on the 1st instant; the Seghill Colliery having passed into the hands of Messrs. Laycock and Co.; the Burradon Colliery has become the property of Joshua Boyer, Esq., of Leeds, with whom, however, the Messrs. Carr retain an interest; and the Cowpen Colliery is the property of Messrs. Cookson, Cuthbert, and Co., as formerly stated. So that a little new blood is now infused into the great steam coal field in the North, which will, no doubt, give increased stimulus to the trade. Those gentlemen who have become possessed of the extensive collieries at Cowpen are, as we stated before, the owners of the Mickley Colliery, which is situated west of Newcastle a few miles, on the south side of the Tyne; and in connection with the latter colliery they have recently leased a large royalty belonging to the Duke of Northumberland, and have commenced to drive an adit on the hill side near the Ovingham Boat-house, for the purpose of winning this coal.

The owners of the Ryhope Colliery have lately reached the first seam of coal in their new shaft, which is 3 ft. 2 in. in thickness.

The owners of the Tyne Main Colliery are preparing to sink from the seam they work at present to the Beaumont seam, which is 26 fms. deeper. The seam they work at present, which is the low main seam, has, as we noticed before, become bad in one district of the colliery—that is, to the north—owing to a thick band having made its appearance. Should the Beaumont seam prove good at this point it will be a very important acquisition to this colliery and to others adjoining. It has been worked about 1½ mile west of this point, where it is an excellent coal for house purposes.

The workmen at the Burradon Colliery have presented Mr. J. Fryar, their late underviewer, with a valuable watch and chain, as a testimonial of their respect, he having been appointed to superintend the Seghill Colliery, now the property of Messrs. Laycock and Co.

The strike at Heworth Colliery may be considered as virtually at an end. Some of the old men belonging to the colliery have returned to their work, and all those who refused to work were ejected last week from their houses. A considerable number of men are now at work, a number having been got from the South Shields Colliery, which is the property of the gentlemen who work the Heworth Colliery, and many men from other collieries have also been got—some of those now occupying the houses left by the old men. With respect to the latter, many of them have got employment at other collieries, so that the affair will shortly be forgotten, and the colliery stocked with men from the district generally. The men at the Heworth Colliery were employed under the monthly agreement. Whether our views are correct or not, we have a strong conviction that if we once get back to the old yearly bonds we may be liable to those disturbances of trade and progress—strikes. No doubt the workmen in the North have gained considerably in intelligence the last few years, but we are afraid that they are not so far advanced as to preclude the possibility of such occurrences. Of course we do not mean to throw the entire blame of such things upon the workmen in all cases, but where the prices offered are equal to those in the district, and the owners are willing to make reasonable concessions, they surely are to blame; and this will, we think, apply to the case at Heworth. One remark, however, we would make in conclusion—*that strikes are often caused by a bad feeling having been engendered between the workmen and the manager of a colliery, more than any difference about prices.* So that this ought to induce the managers of collieries to cultivate as much as possible kindly feelings towards the workmen.

A rather disagreeable case has occurred at the Hetton Colliery. Two men, named Joseph Oaley and Thomas Liddell, left their work at that colliery on Saturday, Aug. 21, at two o'clock instead of four. They had, it appears, gone down the pit to work at half-past eight A.M., and ought to have remained until four P.M. But they left their work and proceeded to the shaft at two P.M., where, after some altercation with the onsetter, they were allowed to ascend the shaft, after causing a stoppage of the work for fifteen minutes, which is a serious matter. They were summoned for this offence before the magistrates at Houghton-le-Spring. They were defended by Mr. Roberts, and the magistrates dismissed the case, stating as the reason for doing so that the owners of the Hetton Colliery had not made the case out against the men. The defence was that the men had performed a sufficient day's work, and that, therefore, they had a perfect right to leave when they thought proper to do so. Now, we think that this merely amounts to a quibble. It may be true that they had got sufficient coal cut loose to make a day's work, but it is also part of their duty to fill this coal; and, again, they could not be said properly to have earned their wages until the coals had actually reached the surface, and the course they pursued had a direct tendency to prevent the coals from getting to the bank. It will be noticed, that the whole time they were requested to remain in the pit was seven and a half hours, which will not be considered too long by reasonable persons; and we will add that no real friend of the workman will advise him to leave his work before the regular time, unless he is ill. If we presume that in some cases he can earn 4s. 6d. before seven hours and a half are expired, it is certainly not advisable that the workmen should proclaim this on the house tops. We repeat that no wise man will leave his work before the regular hours are expired, and no real friend of his will advise him to do so. If any number of the men in a colliery were to do so it would seriously interfere with the drawing of coals, and injure both the owners and the workmen; their interests are always necessarily mutual. Again, if we suppose that the onsetter had refused to send the men up, and they had made the signals themselves, they could have been summoned for infringing the special rules of the colliery, which would have altered the case materially. This was done at Shipcote Colliery lately, it will be recollected. However, we hope that a case of this kind will not occur again, as it is proposterous to suppose that the men can leave their work when they choose to do so.

In taking leave of the meeting of the Institute of Mechanical Engineers, we are sorry to notice that a marked deficiency occurred, where we anticipated there would be one—in the exhibition of models, plans, &c., on subjects connected with the extensive collieries here. Only one practical colliery engineer, as far as we are aware (certainly an honourable distinction), exhibited such models and plans—Mr. Hedley, of the South Hetton Colliery. No doubt the paper of Mr. Taylor would have supplied this hiatus to a great extent. Still there are many eminent colliery engineers in the district who could have supplied models, &c., of the particular engines employed by them, which would have been highly interesting and useful to many of the members and others who attended this gathering of engineers.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

SEPT. 9.—There is certainly a better feeling amongst ironmasters, less owing to any large actual improvement, than to the more promising aspect which the future presents. Still there are rather more orders for the United States and the home market, but a considerable number of works are working short time, and some doing very little indeed. Enquiries for rails and other descriptions of iron are numerous, but South Staffordshire prices are too high to lead to many being given out in this district. Purchasers for America, evidently anticipating, as every one does, that there will be a good trade in the spring, are desirous of entering into contracts for delivery in the spring or summer at present rates, which, however, ironmasters are by no means disposed to accept. There is, no doubt, still a good deal of under-selling, taking trade prices as the standard; but it is by no means probable that, with the prospect of a good spring demand, any reduction will be made at quarter-day. Pig-iron, ironstone, and coal realise no better prices, but the demand is better and holders are firmer.

In the General Hardware Trades there is no particular change. There is more doing than there was a month ago, and in some branches the improvement is considerable, but it must extend greatly before anything like activity prevails.

The colliers' strike is not yet terminated. No further attempt has been made to induce the thin coal miners to ask for an advance; and about Tipton a considerable number of the men have gone in. In the neighbourhood of Oldbury, however, large meetings have been held during the week, bands of music perambulate the streets, and the public are requested to buy a paper from "a poor collier." This mode of begging, both by the colliers and their wives and children, is carried to a large extent, but the public are getting tired, after ten weeks' repetition of these constant appeals, and are beginning to see that by thus assisting the colliers they are only encouraging them to prolong what is increasingly felt to be a hopeless and most ill-timed struggle. With the present depression in trade, and the increased competition with other iron-making districts, it is impossible to give the very high rate of wages which the thick coal colliers in the district east of Dudley have hitherto received, until trade greatly improves. An attempt has been made to induce Lord Ward's men, west of Dudley, to ask for an advance of 1s. per day; but his lordship has announced that unless the notice is withdrawn he will scaffold over the pits, and close them until he shall think proper to resume working. This may be deemed arbitrary; but the idea of an advance, with iron at the present rates, is so entirely out of the question, that it will probably prove a kindness to the colliers thus at once to check any such attempt.

In order that a more correct idea may be formed of the rate of wages for colliers in this district than can be gathered from the mere statement that the men get so much per day, I have obtained information from two sources, which may be regarded as reliable, the result of which is as follows, all the prices being at the reduced rates:—Thick Coal: Wages 4s. per day for a fixed stint gateroad, generally set at 10s. to 12s. per yard, holing 2 yds. wide and 2 yds. under, cutting 6 ft. long 5 ft. thick, the stint for a day's work for pikemen. An average man will do his stint in six or seven hours. It occasionally happens that the day's work may be got out in four hours, at other times it may require ten, but the above is the average. A "stint" man usually leaves off work about three or four o'clock in the afternoon, commencing at six in the morning, and in that time he will do from 1¼ to 1½ day's work, equal to 5s. or 6s. at the present reduced rate. Thick coal bandsmen, or loaders, receive 1¼ day's wages, or 5s. for each day's work of 11 hours, exclusive of an hour allowed for dinner, superior men having 6d. or 1s. per day more. Five days a week is considered full time.—New Mine Coal: Wages 2s. 9d. per day for the stint gateroad, from 7s. 6d. to 8s. per yard; stint for a day's work, holing 3 yds. wide and 2 yds. under, cutting the top and blowing, 5s. per day; bandsmen 3s. 3d., per day. The average time for a day's work is four hours. The pikemen usually work at night, the coal being got out in the day-time. An average workmen will do 1¾ day's work from six p.m. to six a.m., some doing 2½ to 3 days' work in a night, in order to make up for lost time, when they have been drinking during the first part of the week.—Heathen Coal Holing: Stint 3½ yds. wide and 1¼ yd. under. Average time for a day's work five hours. Bandsmen 4s. 1¼d. per day.—These amounts have been put rather lower than higher than the estimate. It appears to be admitted that a collier ought not to work more than five days per week.

At the Police Court in this town, on Wednesday, Mr. Thos. Hampton was, on the information of Mr. Lionel Brough, Inspector of Coal Mines, convicted of leaving two shafts at Deepfields unfenced. A blind horse had fallen down one and was killed, and a footway was within a yard of one of them. The defendant was ultimately fined 5*l.* and costs, but a great effort was made by his attorney to show that he was not the owner in the sense required by the Act, as he had let the mine to two men to work it, and they were refusing to act up to their agreement. It is often a matter of great difficulty, with the present wording of the Act, to find any one liable to keep a pit fenced; and parties who complain to the Inspectors must not be surprised if the latter are sometimes unable to fix the offence upon any individual who may be clearly liable, as cases are frequent where disputes between lessees and lessors make it very difficult to fix upon the responsible party. If the Inspector had power to summon the owner in fee of the land, the latter having the power to recover from his lessee, the present difficulty would be obviated.

A strong contest is going on between the North Staffordshire and the

London and North-Western Railway Companies. The former complain that the latter have violated their agreement, and have entered into an agreement with the Midland and Great Northern companies, by which they can carry their traffic to London without going on the North-Western line.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

SEPT. 9.—The position and future prospects of the Iron Trade begin to assume a more encouraging aspect; but the slight improvement which is now observable will not be felt for sometime throughout the trade. There are indications of a better trade, as is evidenced by the increase in the orders from America and other states, as well as a better enquiry for iron for home consumption. The demand for pig-iron is dull, and the falling off in the exports of this iron is the best indication of the depression which has existed in all the branches of the business for some time past.

The Coal Trade presents indications of improvement as the demand for autumn sets in.

At Rotherham, on Monday, Mark Davy, agent at Grange Colliery, appeared to answer informations laid by Mr. Morton; and, although the verdict was given against the defendant, the general feeling was that Mr. Morton, the Government Inspector, had acted somewhat harshly. Although the opinion of Mr. Greenwell is that no previous arrangement can prevent occasional accidents from sudden outbursts of gas, Mr. Morton seemed to entertain a different opinion. Mr. Whitefield, for the defendant, said that Mr. Morton had enunciated some highly scientific opinions; but the question was—What was the fact? Mr. Morton might be right and might be wrong in his science, but he would rather rely on facts themselves than on scientific opinions. The pit had been in operation for two years, and up to July 7 (three days before the accident) the men worked in the pit with naked lights, and never saw the slightest trace of gas; in fact, the ventilation was so complete, and the current of air so powerful, that they were constantly subjected to inconvenience by having their lights blown out. The magistrates, after hearing a number of witnesses for the defendant, convicted him in the nominal penalty of 1*l.* and costs. There was a similar charge against a man named Gillings for a like offence, but it was withdrawn.

At Standish, an inquest was held on the bodies of a man and boy, who were killed by an explosion at Mr. Taylor's Tunnel Pit; and, after a long consultation, the jury returned a verdict of "Accidental Death," reprimanding the fireman for allowing the deceased to go to their work before his place had been examined.

On Saturday a boiler explosion occurred at Gildersome, near Leeds, by which four were killed and seven injured. The body of John Bradley, the engineman or fireman, was found in a horrible condition in a field 150 yards from the mill. In its flight it had come in contact with a stone wall, at a distance of 140 yards from the mill, with such force that a portion of the wall was thrown down. Parts of the skull, the brains, &c., were found scattered about in the field, and the body in its flight had been denuded of clothing. It seems that during the night the steam was got up, or kept up, and that the boiler was for several hours left in the charge of a mere lad, to fire-up, &c. Bradley, the regular engineer, a young man of 18, who appears to have been very ignorant, and unfit for such duties, came about six o'clock in the morning, and sent the lad home. Bradley, upon looking at his boiler, was amazed to find that some of the plates were red-hot. Knowing no better, and desiring to cool them without delay, he at once turned on a quantity of cold water. Of course the explosion followed instantaneously, and the wretched youth fell amongst the victims of his gross ignorance. The bodies were identified, and the inquest adjourned until Friday.

On Tuesday morning, an accident occurred which is likely to prove fatal to James and Patrick Clarke, two brothers, in the employ of the Ince Hall Coal Company, at the Yard Pit. It appears that the two young men, with another man and a boy, were descending the shaft in a cage, and when about half-way down the cage suddenly stopped, from some cause not at present ascertained. The man got out and slipped down the iron rod to the bottom of the shaft in safety. The two brothers followed, but, unfortunately, one of them was too close after the other, and the consequence was that he knocked his brother off, after which he fell from the rod himself; both of them were thus precipitated to the bottom of the shaft, falling a distance of not less than eighty yards. The cage righted itself, and, with the boy in it, reached the bottom in safety. The two Clarkes were immediately picked up, apparently in the agonies of death. Neither of the young men appear to be more than 20 years of age, and both are in a precarious state.

At the Wakefield Petty Sessions, on Monday, Mr. Scruton, manager of Messrs. Pope and Pearson's collieries, applied for a number of warrants for the purpose of ejecting twenty colliers, who occupied houses at Whitwood and Altofts. Mr. Scruton said he had signified his intention to the occupants of the houses, and he desired them to be present at the Court-house, that day, to show why the warrants should not be granted. The names of the men were then called in open court, but none of them answering, the warrants of ejectment were granted.

The Mill Town Mine is improving, and the prospects of Mill Dam Mine are much improved. The men are proceeding vigorously with the sinking of the new shaft. There is nothing doing in other mines worthy of notice.

The first general meeting of the shareholders of the Peak Forest Mining Company, on Wednesday, was held at the house of Mr. Fordham, Castle-street (Mr. John Pitt in the chair), when a very satisfactory report of the progress of the company, since its formation in January last, was submitted to the meeting. Directors, officers, and auditors of the company were elected for the ensuing twelve months.

It is really gratifying to notice the feeling evinced by those connected with the coal trade of South Staffordshire towards Mr. Lionel Brough, the Government Inspector for their district, who is about to be removed to South Wales. It is frequently remarked here that, although Mr. Brough does so much good both for the employers and employed in his district, his name is not so frequently seen in connection with informations and the infliction of penalties upon those under his care as that of our Inspector, and it has even been hinted that the continual actions are highly prejudicial to promoting that good feeling towards a public officer which should exist. At a meeting recently held, resolutions were passed to the effect that Mr. Brough had entitled himself to the esteem and gratitude of the mining community of South Staffordshire by the strict impartiality, dignity, frankness, and good sence which had signalised his official career in the discharge of his difficult and momentous duties; that while Mr. Brough's attention had been mainly directed to the preservation of human life, and the adoption of measures conducive to the welfare of the labouring population, it had been at the same time his good fortune to bring to the discharge of his duties an extraordinary amount of scientific intelligence, which the masters had not been slow to turn to good account; and that under these circumstances a movement should be organised in the mining interest for giving a dinner to Mr. Brough previous to his departure.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

SEPT. 9.—There is no change to report in either the iron or coal trades. It is understood that two or three orders have been received from the Continent, but they are believed to be of no great importance. From America the commercial intelligence is considered more favourable, but we have heard of nothing from thence calculated to benefit this district. For coal, steam and household, the demand is tolerably steady, but freights are not taken up very readily.

At the Rock Petty Sessions, last week, a case was brought forward which turned upon the custom adopted in the Rhymney Collieries of selling stalls by the opener to the finisher. The plaintiffs, John Jones, a lad about 14 years of age, and John Vaughan, about 16 years old, summoned Malachi Harris for money due to them. The over-looker said he never allowed traffic in stalls without his consent had been first obtained, but the Bench ordered the defendant to pay the amount claimed, with costs.

At the same place, Samuel Hill, a workman in the Hendon Colliery, summoned his master, Mr. Edmund Jones, of Newport, for non-payment of wages. Hill had acted for some years as haulier in a coal level, and in Sept. last the colliery was let to two persons, who continued working it until June 19, when they abandoned it for want of means. The Bench, after hearing the case, came to the conclusion that the defendant was not liable.

At Blaina, Robert Edwards, a collier, has been charged before the magistrates with leaving the employment of the Tredegar Iron Company without giving the usual month's notice. The defendant, it appeared, had told the overman that he was going, and delivered up his tools, the other making no objection. The Bench thought the overman had done wrong in receiving the tools, and dismissed the case on defendant promising to return and work out the month.

The Dunraven Colliery, Pontypridd, is about to be submitted for sale by auction.

The strike among the Bedminster colliers has revived since we last referred to the subject, and a little while ago a number of them savagely assaulted one of their comrades, James Smith, because he refused to leave his work. Smith was so badly hurt that his life was at one time despaired of, but he has so far recovered as to be able to give evidence against the prisoners. The facts having been proved, four of the men were committed for trial, and the others, against whom there was not sufficient evidence, discharged. The men are still resolute in refusing to go back to work, although the entire number of hands have not struck.

A fatal accident occurred this week in a quarry near Maesllwch, Breconshire. A man named James, and three others, were engaged in clearing away some earth, a large mass overhanging the spot where they stood. In the course of the day the heap fell and covered James. He was extricated as soon as possible, but it was found that he had sustained very severe injuries. He was removed and attended to by a surgeon, but died in the evening. An inquest was held, and it transpired that the contractor for whom the men were working had cautioned them concerning the mass. A verdict of "Accidental Death" was returned.

The general testimony to the ability and worth of Mr. Lionel Brough, our new Government Inspector, gives great satisfaction. He is said to be a great friend to the colliers, and the colliers here want a few influential friends badly enough. We hope Mr. Brough will turn his attention to the truck system, which is now rampant on the hills, and to other grievances which the miners suffer under at present.

ON THE RELATIVE EVAPORATING POWER OF BRASS AND IRON TUBES.

—In the discussion that followed the reading of the paper "On the Relative Evaporating Power of Brass and Iron Tubes," before the Institution of Mechanical Engineers, by Mr. George Tosh, one very important fact seems to have been lost sight of, which is that in locomotive boilers of the ordinary construction combustion goes on to some extent within the tubes—that is, the combustible gases do not all unite with oxygen in the fire-box of boiler, but the mixed gases are drawn into the tubes while the combustion is going on. Now, the greater the conducting power of the tubes—other things being equal—the sooner will the temperature of the gases be reduced below that necessary to insure their chemical union: so that in such a boiler it may make but little difference, so far as its evaporating power is concerned, whether brass or iron tubes are used, for what is gained on the one hand by the greater power of the brass to transmit the heat from the gases passing through the tubes to the water in the boiler, may be balanced by the loss arising from the less perfect combustion of the gases within the tubes. While, on the other hand, although the iron tubes do not transit the heat from the gases so rapidly as in the case of the brass tubes, the temperature of the gases is not so soon reduced below that necessary to insure combustion, and more heat is *generated* from the same weight of fuel. Experiments made by the writer in January, 1855, with water as the heating medium instead of gas, as in the case of the locomotive boiler, gave the conducting power of copper, brass, and iron tubes as follows:—Iron, 100; brass, 136; copper, 171. Experiments made by J. R. and H. S. Robinson, of Clinton, Mass., in Jan. and Feb., 1856, with brass and iron tubes in boilers so constructed that combustion took place before the gases were drawn into the tubes, resulted in showing that 1000 square feet of brass tube surface was equal in evaporating power to 1300 square feet of iron tube surface.—J. R. ROBINSON: *Journal of Franklin Institute.*

MINERAL PRODUCE AND MANUFACTURES OF PRUSSIA.

HAMBURGH, SEPT. 8.—The commercial crisis of last year is telling upon many institutions connected with commercial enterprise both in Sweden and Norway, and many valuable mines are about to be brought into the market that are well deserving the attention of English capitalists. In the full knowledge of the advantages which have long been derived by the British manufacturers of cutlery from their importations of steel from Sweden, strong efforts are at this time making in France to form societies or joint-stock companies to purchase these mines, which, if carried out, might seriously injure the manufacturers of Sheffield; and though those engaged in trade in that quarter are supposed to be in general sufficiently alive to their own interests in such matters, it can do no harm thus to call their attention to this threatened interference, in case they should consider it necessary to take steps to counteract the operations of their French rivals.

This incidental reference to Swedish mines has suggested the idea that in England little is comparatively known of the extent of mining operations now carrying on in Prussia. This branch of industry in that country is rapidly assuming considerable dimensions, as may be seen from the following official returns for the last year:—

	Value of produce in thalers.	Workmen employed.	Their wives and children.
Coal, iron, and other minerals	34,125,861	114,832	195,930
Forges for iron, tin, zinc, &c.	77,811,055	59,510	124,441
Salt.....	1,753,516	2,275	5,313
Total	113,690,432	176,617	325,684

So that it appears the mineral produce of Prussia does not fall much short of the annual value of 20,000,000*l.* sterling, and that the working of it affords employment and subsistence to somewhat more than half a million of the inhabitants. This is another instance of the useful advance which Prussia is making in the scale of nations; and although in the details which the returns referred to supply it appears that the value of the gold found did not exceed 5740 thalers, and that the silver produced was only estimated at 814,604 thalers; yet, as it is also shown that the value of coals had reached 23,453,349 thalers, and that of pig-iron amounted to 13,629,861 thalers, there can be no doubt but that the importance of the two latter would be found more than sufficient to compensate for the total absence of the other two, in promoting the true wealth and prosperity of the kingdom of Prussia.

With the raw material thus abundant, much attention is devoted in Prussia to the manufacture of all articles of which iron is the staple. The fine castings of Berlin have long been famous as works of art, and the recent festival at the completion of the thousandth locomotive was a sufficient proof of the advances which had been made in that important branch of manufacture. In the making of arms, too, great perfection has been attained, and at present large orders have been received from Russia—and the execution of them is well advanced—for muskets of the last Minié pattern, of 38-in. length in the barrel, and warranted to carry a ball effectually not less than 1200 yards, arrangements being at the same time in progress for arming the whole of their own troops with an equally destructive weapon.

PRACTICAL MINING OPERATIONS IN AUSTRALIA.

PLANT AND OPERATIONS OF THE PORT PHILLIP COMPANY.

The Port Phillip Company being one of the few gold mining adventures which continues to exist, a short account of the quartz works at Clunes will not be uninteresting. The works consist of crushing and amalgamating machinery, erected at the foot of the hill containing the quartz reefs. Within a few feet of the water level, and about 40 yards distant from the stream, are the main buildings, containing the stamping batteries, Chilian mill, steam-engines, amalgamator, and washing apparatus. The buildings are of wood, roofed with corrugated iron, about 30 ft. high at the crown, 120 ft. in length, by an average of 50 ft. in breadth. The approaches to the works over the creek are by two bridges, about 100 yards apart, and constructed of rough logs, covered with turf. The wood used for fuel is chiefly red gum and box, obtained from the nearest forest, from two to four miles distant. Adjoining the main building at the northern end is a fitting-room, with a lathe and other appliances; so that all the smaller class of engine fittings, bolts, screws, plates, &c., required in alterations and repairs are turned out by workmen on the premises. A short distance from the fitting room, in a detached building, also of wood, is the blacksmiths' shop, containg two forges, and here all the wrought-iron parts are made and repaired. Facing this building is the carpenters and millwrights' shed, where the frames and shafts of the stamping batteries, the strikes, shaking tables, tubs, and all the woodwork required is made, repaired, and fitted by the company's workmen.

On the northern portion of the ground are the offices of the company, sleeping rooms for the clerks, the store house, and the retort house, and in the rear the stables for the two horses required about the works and for the escort duty. The store house contains an ample supply of iron of different kinds, duplicate portions of the more difficult parts of the machinery, stamp-heads, bed-plates, chains, blocks hooks, nails, screws, iron and brass wire netting for the stamp boxes, blankets for the washing-tables, mercury, oil, grease, naphtha, cotton waste, and everything in fact likely to be required on the works, and that could not otherwise be readily obtained or made on the spot. The retort house is fitted up with one of the patent retorts, brought out originally by the Colonial Mining Company for their Bendigo adventure. Here the amalgam from the Chilian mill and the barrel amalgamator is separated by heat, the mercury passing off by evaporation through a large cast-iron pipe into the condensing chamber, in the rear of the furnace, from which it is drawn through cold water, with very little loss, in the bright liquid form presented by the mercury of commerce. In the clerks' office the books of the company describe accurately the state of the works at any particular period when information may be desired, the results obtained, and the expenses incurred and liquidated on the spot out of the proceeds of the adventure. In the rear of the main building is the calcining kiln, 12 ft. in height, and with large open mouth. The latter is on a level, higher up the face of the hill, with the tramways of the Clunes Company, by which the quartz is brought down from the mine.

The quartz intended to be calcined is delivered at the mouth of the kiln upon a temporary dumping floor, and from thence it is filled into the kiln by three men, employed by the Port Phillip Company. The fires are started from below, the wood and quartz are filled in alternately, almost without intermission, except during a portion of the night and on Sundays. The capacity of the kiln is about 100 tons. During the greater portion of the 24 hours, however, the process of withdrawing is constantly going forward, and the mouth of the kiln presents the appearance of an inverted cone, down the sides of which the burning mass is slowly passing, as the three men below withdraw its contents. The calcined quartz as drawn, is suddenly cooled, by cold water being thrown upon it from a reservoir near at hand. The quartz being reduced below a maximum size of 4 in. cube is measured into wagons, tally being kept by a man deputed by the Clunes Company as well as by the Port Phillip Company's men, as by the quantity thus delivered the sum to be retained for crushing is ascertained, as well as the gross and particular portions of work performed by the different parts of the machinery.

The crushing power employed in the mill consists at present of the 12-head and one 8-head stamping batteries, and a powerful Chilian rolling mill of improved construction. The northern 12-head stamping battery is driven by one of Clayton and Shuttleworth's 10-horse portable engines, working at the rate of 80 or 90 revolutions per minute; this engine also drives the turning lathe. The middle 12-head and 8-head batteries are driven by a stationary 20-horse power horizontal engine, with Dunn's patent retort boilers; with full steam on, it is usually worked at the rate of 120 or 140 revolutions per minute. The boiler is considered a great improvement on the boilers usually employed, as steam is more readily and economically produced, the boiler is more easily cleansed, and there is less liability to accident. The boiler to this engine has eight retorts connected with the steam-pipe, the flues circulating both above and below them. A 14-horse power Clayton and Shuttleworth's portable engine, at the southern end of the building, drives at present the Chilian mill, the barrel amalgamator, and the shaking table connected with it. It also works a Californian lift-pump and a beam-pump, supplying the machinery connected with it with water for all operations; the supply of water, being obtained from the creek, is inexhaustible. The stamps' heads are of cast-iron, and the crushed stuff is washed out of the beds by the steady flow of the water and the splash of the stamping stroke, and received by the strikes, which are long wooden flats, about 2 ft. wide, and 10 to 14 ft. long, with a rim on each side about 3 in. high; each of these strikes is laid at an incline of about 1 in 12, and is covered with three series of blankets, prepared for the purpose and imported by the company. The tier near the mouth of the battery is always found to contain by far the larger proportion of gold mixed with the sand, and is changed every two hours. The blankets are washed of their contents in tubs, and the residuum placed in large barrel amalgamators with mercury, and, after being sufficiently treated, is let out upon a shaking table, the sand washed away, and the amalgam is ready for the retort. The Chilian mill will eventually be superseded by a stamping battery, as it is found that, although the Chilian process will save a trifle more gold, its operation is so tedious and costly as to lead to the substitution of the latter for all large operations.

The company tried their first battery, of eight heads, in May, 1857; it was not until June that the adjoining twelve-head battery was in operation, and it was the end of October before the third battery was completed. Up to March 27 the company had crushed 7615 tons of quartz, the yield of which has been from 1 oz. 8 dwts. to 1 oz. 12 dwts. The price originally contracted to be paid for crushing and cleansing was 3*l.* per ton, and this was paid up to a recent period. The improvements effected have enabled them to reduce the charge to 2*l.* 10s. for calcined quartz, and 2*l.* 5s. for raw quartz, of a certain fineness. The company, of which Mr. R. H. Bland is the representative and managing director in the colony, in the Clunes adventure, has Mr. H. A. Thomson, a gentleman of large experience in English mining operations, as manager to the works; Mr. Robson, who for 25 years was connected with the St. John del Rey Mines, in Brazil, has charge of the amalgamating department; Mr. R. Davis, from Messrs. Crawshay's works in South Wales, is the engineer in chief; Mr. Dumaresq, late manager of the Santa Ana Silver Mine, in New Granada, has charge of the Chilian mill; and Mr. H. S. Leake is secretary. Six engineers, four firemen, one blacksmith, one striker, two machine fitters, four carpenters and millwrights, six stampmen, two mill-feeders, and three labourers, are regularly employed, besides a number of occasional hands. The wages range from 10s. per day for labourers to 18s. per day for mechanics. The timber and firewood consumed is considerable, the production of which employs a large number of persons, and the entire cost of the works up to the present time may be estimated at from 14,000*l.* to 15,000*l.*

MACHINERY AT THE GOLD FIELDS.

It is very common for our English readers to imagine that we are almost entirely dependent upon Great Britain for that machinery to which we must look ultimately for the full development of our gold fields, and the augmentation of our natural force; but it is a mistaken idea. Enterprise in this colony is not confined to the bridging over of bays or the construction of railways and telegraphs. Our foundries and our workshops are able to produce to perfection those multipliers of power which, according to Emerson, have added 250-fold to the force of the British workmen. Messrs. P. N. Russell and Co. have for years been manufacturing quartz-crushing machines in considerable numbers. They have made many for our Victorian neighbours; and possessing, as these machines do, all those improvements in detail which experience has suggested—without departing from the old principle of rollers and stampers—they have obtained a name which is exceedingly creditable, and must be very gratifying to the gentlemen connected with the firm. A plentiful supply of fuel, its superior quality and its comparative cheapness, is no doubt greatly in favour of the successful manufacture of machinery in this colony, but the immense cost of getting it to our diggings, in consequence of bad roads, is at present a serious drawback. But now that the importance of facile communication is brought most forcibly under the notice of the public, we may hope that this obstacle will not be allowed much longer to stop in any great degree the progress, among other things, of machinery. It is machinery that has fully developed the gold fields of California; machinery is developing the rich mines of Victoria; and it is now universally acknowledged that New South Wales only requires the application of well-directed force to prove that her auriferous fields will yet supply wealth sufficient to enrich a nation; and in that force, no doubt, machinery will be the most powerful auxiliary. As yet the gold fields of this colony have been almost untried, but the steady increase in quantity of the precious metal, which has lately come down from the various diggings, is a proof that they are beginning to be better appreciated, and before long it is to be hoped that we shall have brought to bear on them vigorously that sturdy power and mechanical force which they require in order to their full development. There can be no difficulty about the machinery, for we have the enterprise and raw material in the colony. Our attention has been particularly directed to several machines which are now being made for the gold fields of New South Wales by Messrs. P. N. Russell and Co., where quartz-crushing is at last becoming popular. These machines are expected to pound from 10 to 12 tons per day; and, in case of emergency, there is provision made for an additional pan and rollers, by means of which they would probably be ample to pulverise half as much again. The engines are on the horizontal principle, and advantage has been taken of all those late improvements which have brought machinery to such perfection as we now find it. Each machine consists of an engine (mostly 10-horse) and boiler, two batteries of stampers, and a pair of rollers. The shafting is of turned iron, and driven from the engine by spur gear, and the framing is of hard wood. There are eight stampers—four working in each mortar, and they are lifted by iron cranes. The four stampers which first descend upon the quartz are made of ironbark (timber), with cast-iron shoes, each weighing 1 cwt. The mortars (in which the stampers work) are also cast-iron. They are fed from behind by means of a sloping channel, and the opening in front is covered by a sieve for the pounded quartz to pass through. When the roughly crushed rock falls through the sieve, it is received by a shaft which passes through it into a pan, where it is pulverised—the gold mixed with the mercury, and the inferior substances washed away. This pan is about 6 ft. in diameter, and has a large sheet of iron all round it to prevent the splashing. The rollers are so constructed as to catch the waste oil, which would otherwise interfere with the amalgamation. They are quite plain, and the arms on which they revolve are secured by joints to a cast-iron centre; and, last of all, there is a retort for separating the quicksilver from the gold. As a whole, these machines are beautiful in construction, and that they perform their work well there can be no doubt, from the numerous orders which have been received. The manufacture of these machines forms only a small part of the business carried on in the establishment to which we have alluded, and the requirements they fulfil, both in reference to public and private works, are alike evidence of the wonderful progress of New South Wales.—*Sydney Morning Herald.*

AUSTRALIA.—Our private intelligence from Australia is to the same dates as the telegraphic announcement furnished in our last Journal,—viz., July 11, from Sydney; July 10, from Adelaide; and July 16, from Melbourne. The commercial accounts from Melbourne are not satisfactory. There had been a great cessation of imports, but, on the other hand, there had been a still greater absence of country orders, added to which one or two failures had occurred in mercantile circles, so that altogether a very uneasy feeling prevailed. The May mail from England had not reached its destination, so that there was no communication from this side on the state of things at home, which did not tend to improve the condition of business at Melbourne. The clipper ship, *Lincolnshire*, had, however, arrived with some ship letters to April 25, which was nine days later than the April mail. There is much intelligence respecting railway matters, but chiefly in reference to the Geelong and Melbourne Railway. The first accepted tender for the Geelong and Ballarat trunk line had lapsed for want of funds, in compliance with the conditions of the Government, and had passed to the next latest tender, that of Messrs. Evans, Merry, and Co., for 1,278,218*l.* The Melbourne and Suburban Railway had commenced the earthworks. The Geelong and Melbourne Railway seems to have got into a most deplorable condition, the result apparently of the peculiar policy pursued throughout by the directors, in opposing all adjuncts, as branches or extension of the line, although efforts had been made to show that the existing state of things was the consequence of the acts of the Government. According to their own statement, made at the half-yearly meeting of the shareholders, held July 6, the company is 95,000*l.* in debt, which they wanted the Government to pay, as well as 282,000*l.* worth of debentures, and to give the shareholders 6 per cent. debentures at par for their shares, but there appeared no probability of bringing this negociation to a successful issue. The creditors of the company at Geelong have agreed, it is stated, to keep over their claims for 12 months, with interest added at 10 per cent.; and the workmen to whom arrears were due were to be paid off by the sale of the surplus plant. Notice had also been given that the London agency would be dispensed with after the expiration of six months, and about half the local staff had been discharged. The *Melbourne Argus* of July 15 says that the negociations between the Geelong and Melbourne Railway and the Government are positively at an end. "The company," says the Journal mentioned, "have been too extortionate in their demands, and the treaty has been cut short by a positive refusal to accede to their terms. From the first the directors and shareholders have assumed a most unwarrantable tone towards the Government; and the public will be quite satisfied with the reasons assigned for refusing any longer to listen to the insolent claims of a company, urged in such a manner as to lead persons at a distance to suppose that the Government were to blame for all the mistakes and evils that have arisen since the first commencement of this misdirected interprise."

The returns of gold for the previous four months were in excess of those for the same period of last year; and, from the more general application of machinery at the mines, it was considered that there would be a progressive augmentation of the produce of the gold fields, without reference to fresh discoveries constantly made, and the opening up of new localities. An act to regulate mining associations had come into operation, and is said to work satisfactorily, both for capitalists and labourers. It was also proposed to establish a code of regulations for issuing mining leases, and this, it was hoped, would be followed by an Act to facilitate mining on private property, where the Crown claims the right of minerals. By the report of the Census Commissioners it appears that 62,236 persons are engaged in the several operations of mining; and taking the quantity of gold exported in 1857, it gives an average to each man of 44 ozs. 6 dwts., or about 171*l.* 11s., as the average annual earnings of each man.

Since the departure of the June mail four vessels had left Port Phillip, laden with the precious metal. The *Zuleika* sailed on June 19, for Calcutta, with 260 ozs.; the *Sultana*, on June 24, for Liverpool, with 40,504 ozs.; the *Suffolk*, on July 3, for London, with 79,992 ozs.; and the *Ocean Chief*, on July 13, for Liverpool, with 47,594 ozs.

Our Sydney correspondent mentions that the financial measures of the Government were in arrear in the Legislature, and the estimates even had not been passed. It appears that the Ministry does not possess general confidence, and were apprehensive of the consequence of bringing any vote of this nature to an issue. The question of railway extension was to be brought under the consideration of the Chambers, and three additional had been surveyed—one to the south, one to the west, and one to the north—their united length being 70 miles, and their contemplated cost about 800,000*l.* The India Relief Fund exceeded 5000*l.* in amount, and 4000*l.* had been remitted to Calcutta. It was expected to increase very rapidly.

From Adelaide our letters reach to July 10. Trade generally was dull, although goods of first quality obtained remunerative prices. One or two mercantile firms and several small traders had suspended payment, but general confidence was not weakened, and credit, on the whole, was good. There was a probability of a scarcity of wheat, consequently the price of flour had considerably increased. An unusual prevalence of dry weather had continued. Public works were proceeding with vigour. The Adelaide and Melbourne electric telegraph was to be opened throughout on Sept. 1, the delay in doing

so having been occasioned by damage done to the submarine cable at the mouth of the Murray River.

With regard to the question of postal communication between the Australian colonies and the mother country, the *Adelaide Register* of July 10 says, "We cannot forget that we have our own special grievance—the non-delivery of our mails at a South Australian port by the ocean steamers. We entered into the postal contract on the express condition that that omission should be rectified before the close of the present year; half the year has passed away since we began to contribute to the subsidy, and yet no steps have been taken to fulfil the condition." Being the depth of winter mining matters necessarily were not so animated. The Burra Burra and Kapunda were nevertheless yielding largely. The shares of the Burra Burra had advanced from 136*l.* to 150*l.* The price of the Princess Royal shares was 25*l.* Copper was quoted at 105*l.* per ton. At the Echunga gold fields, it was reported, there was good prospect of profitable operations.

The *Moses Taylor* arrived at New York with Californian dates to Aug. 5, and nearly a million and a half dollars in gold. Notwithstanding the great rush of miners to Fraser River, the yield of the Californian placers during the present year is in excess of that of the year previous.

Mr. J. B. Chevallier, of Sacramento, has invented a method of extracting gold from the dross of the quartz mills. These "tailings" are the sulphates, chiefly of iron, which, after pulverising, are rejected in the amalgamating process, and thrown out generally as worthless by the miners. He found them to contain from 50 to 100 cents of gold to the ounce of sulphate, and succeeded in bringing his machine to such perfection as to enable him to work over a ton of the quartz waste per day, from which is yielded an average of $100 per ton—$1000 being sometimes extracted from this material, which costs only $30 in its almost refuse state. In addition to the sulphates, a considerable amount of mint and assay ashes are subjected to the searching process. But a larger business still is done in the black sand procured either directly from the miners' camps, or from the bankers, who obtain it in cleansing the dust they purchase. These "blowings," as they are denominated, are sometimes very rich, yielding as much as $210 upon 17 ozs. of sand. The use of the sulphate does not end with the surrendering up of its golden richness, but it is sold at 3 cents per pound, and converted into a common article of paint, which, after passing through the mill, is of a violet colour.

The news from Fraser River is interesting. Another shipment of $50,000 in gold from the new diggings had reached San Francisco. The tide of emigration to the northward had, however, been partially checked by the discouraging reports circulated by the disappointed gold-hunters. During the fortnight preceding the 5th inst. 12,000 persons had taken passage for Victoria, while 2000 had returned from the same point.

MINES AND MINING IN IRELAND—NECESSITY OF GOVERNMENT INSPECTION.—No. IV.

So far has been treated principally the necessity for the appointment of mining surveillance for Ireland, upon the grounds of the dangers to which, from the nature of the employment, all miners are subjected, and particularly in Ireland, from the want of legal supervision; from the value of their productions to the nation; and the duty of Government to protect them from the evil consequences of ignorance, carelessness, or cupidity, on the part of their employers, as exhibited in want of proper ventilation and the supply of air, of weak, unsafe, or improper machinery, of the want of drainage, and of unsafe and too low roadways and working rooms. In mining labour there is much which is so peculiar that it is distinguished from every other kind of employment, and there is none which exercises so important an influence on the physical, moral, and intellectual condition of those engaged in it from early life. It is natural that less attention should be directed to it than to other harrassing and dangerous occupations on the surface, because the operations are carried on out of view, and in situations and places accessible only to the employed and employers, who, if anything be wrong, have an interest in keeping that condition out of the ken of those who might direct public attention towards its improvement. Mines differ so much, not only as regards minerals, but as regards locality and geological character, that they require different modes of working, which differences exercise a material effect on the people employed, and demand constant care and watchful superintendence to prevent accidents, loss of life, waste of mental and bodily energy, and to render each mine, in its way, valuable to the proprietors, the employed, and the nation. The processes by which the ores raised to the surface are brought into a commercial form are very various, and affected by circumstances, are generally carried on by the same capitalists, and employing members of the families engaged in mining. They are similarly subject to accidents, are often conducted by women and children, and are equally amenable as pivots for the improvement of the employed. These ought to be placed, at least in Ireland, under the same surveillance as the mining operations. But it is next to, if not quite, impossible to lay down rules which would, in every case, be applicable to the working of mines, or in the operations rendering the materials fit for transportation or use—the manufacture of iron, for instance. Accidents are and must be frequent, and from the nature of the work, and often the carelessness of the workpeople, unavoidable; yet it is impossible to resist the impression that they might be largely diminished in number and severity. Proper supervision, and power to hold the guilty parties liable for consequences of neglect of certain great principles, certain universally applicable precautions, will assuredly check careless management, correct the parsimonious supply of safe implements and means of working, and banish from their appointments men ignorant of the modes of carrying forward, in safety, operations involving such an amount of human life.

It is true that Ireland does not possess coal mines of such value as England, Wales, and Scotland, but she does possess coal fields of some considerable value, especially in the situations in which they are placed; and she does possess other mineral fields of great value, and of such variety and extent, that let but some countenance and support be afforded, and they will be developed to a degree which cannot at this moment be conceived. All these mineral fields, mining operations, and miners, afford ample room for supervision, and exhibit a crying necessity for the appointment of mining inspectors. In Irish mines few children, comparatively, are employed. They are, however, more numerously engaged now than formerly, on account of the decrease in the numbers of the labouring population, and the higher wages obtainable by young men; and it may well be expected that day by day, from these and other causes—principally the anxiety on the part of their parents to supplement their own earnings—that the numbers will increase. It may be imagined what accidents may occur from the employment of young and thoughtless children in situations of trust and responsibility: trap-doors, for instance, where one act of omission, or momentary neglect, may cause the instant destruction of life and property to an indefinite extent, as has often been the case. The timely appointment of mining inspectors would prevent such a lamentable catastrophe, as well as, by prohibiting the employment at too early an age, prevent the breaking down of the young constitutions—that laying up in store the seeds of disease which destroy the physical condition of the man. But the physical condition of the adult mining population may and would be vastly improved by proper inspection of the mines, and compulsion as to safe means for carrying on the labour. On the thickness of the seam depends the natural facilities for rendering the work less laborious, less wasteful of bodily energy, and less dangerous. Coal seams, for instance, vary from 10 inches to 10 yards in thickness. It will, therefore, be apparent that when the seam is thick the roads and working-rooms are convenient, easily worked in, and not wasteful of bodily power beyond what is actually necessary in the labour of mining; but where they are thin, and therefore more expensive to work, the roads are not so cared for, nor rendered so high as to be either comfortable, convenient, or safe; barely sufficient space is provided to carry on the operations, which become highly oppressive and injurious. The miner is harrassed, unduly worked, and the proprietor saves his pocket at the cost of extra toil to the workman, and an unremunerative expenditure of the labourers' strength and health. There are cases in Irish mines where it is a toil, a labour most arduous, to get to and from the place of work, from a determination on the part of the proprietor to save the cost of *getting* the minerals by saving the expenses in heightening and widening the roadways, many of which are only from 24 to 30 inches wide, and some, perhaps, do not exceed 18 in. in height. "It cannot be supposed that health will remain unimpaired, or that the organs of the body, sentient of their overworked condition, and exhibiting that feeling by lassitude and pain, can go on capable of performing regularly their functions—it is impossible; they become progressively weak, and soon lapse into positive disease. A slow process it may be, but as certain as the production of any other physical effect from a physical cause." If, then, the improper employment of children and women, either as regards age or nature of employment, and the disgraceful state of the mining ways and working places for adults, produce throughout the period of childhood the constant feeling of fatigue, and if this feeling continue, though it may be in a somewhat diminished degree, throughout the period of adolescence, what, from the known operation of the laws of the animal economy, we should anticipate in manhood would be a less perfect development of the growth and stature of the body, a less healthy and vigorous physical constitution, and, as a natural consequence, an appreciable diminution in the duration of life. Confirmation of these remarks may be obtained at any and every mine where the gates or roads are kept low, in the inward curvature of the spine, and chicken-breasts of the children, and in the men stiffly stalking along, often leaning on sticks like cripples, bearing visible evidences in their frames and gait of over-strained muscles and over-worked strength, after they are hardly turned 40 years of age. The appointment of mining inspectors with power to compel the proper attention to the size of the roads and working gates, without materially increasing the cost, or rendering the mines unprofitable,—and to prevent the employment of children at a premature age, or in hazardous, crushing labour,—and to compel the separation of the sexes, and allow only a proper number of beings to occupy each apartment in houses built for and occupied by miners, the property of the employers, would soon materially tend to improve the physical condition, and in some degree the moral condition of the workers.

But there are other influences which may be brought to bear on the same ends. These, however, are more moral than legal, and, indeed, cannot enter into the calculations of either the philanthropist or Government as being attainable by legal means. They are—cleanliness, temperance, supply of religious instruction, supply of amusements of a proper character, and the encouragement of economical and prudent habits. In almost all these most important and vital matters the support and the assistance of the employers are necessary, nay, indispensable. Observation on the part of the inspector will soon discover one employer of sound, liberal, and philanthropic views on these questions, and when one can be found, aided and assisted, emulation will, on the part of others, soon make *his* proceedings and endeavours for the good of his workpeople the rule and not the exception. The appointment of a judicious inspector is alone wanting to initiate a better state of things in Ireland in these respects, and so enable the mining population to advance in the general race of improvement now going on, and side by side with the other labouring classes of Ireland.

Although moral influence if exerted will do much, yet something may be effected by direct legal influence in regard to prohibiting public-houses, and punishing severely shebeen keepers, as regards temperance; and secondly, in compelling all boys between 10 and 14 years of age to attend some school for at least 100 hours every six months. "Such is the anxiety of parents to avail themselves of the value of their children's labour, that even should they have placed them at school for some time they are taken away and put to work, generally from 8 to 10 years old. Except, therefore, some little influence, impressed on them in their infancy, may exert itself on their characters, they neither retain the learning nor habits of thought to which they were subjected during their short school training, but gravitating downwards again they go to swell the vast crowd of labouring men who have no resource from the monotony of labour but sensual enjoyment." There cannot be a doubt it is in the power of the Legislature to correct this. If a boy be not allowed to work till he is at least 10 years of age, let him also be obliged to go to school four hours a week for the next four years of his life, and this, small as the attendance is, would prevent the dullest from going backward, and would lead, in the case of the active, to considerable amount of progress; besides, it would prevent the acquisition of those evil habits, so prevalent among workmen, and readily acquired about this age—swearing, improper language, and lounging about ball-alleys, skittle-grounds, and public-houses, after work hours. As is truly urged by Mr. Tremenheere on this subject, instead of escaping, as at present, from all discipline and control at the age of nine or ten, the boy would feel the gentle pressure of authority and guidance up to the age of 14, by which time it may be reasonably expected to have taken some effect upon his character, and to have contributed to influence and direct the future current of his thoughts and actions. No boy could be subjected from time to time, in the manner and to the extent indicated, to the eye of a careful master, without receiving from that master many good impressions, many admonitions that would tend to correct bad habits already showing themselves, or to prevent them being formed, many suggestions of good sense and right views respecting their own conduct or concerning the numerous subjects of practical importance continually presented to their minds in relation to their own sphere in life, or to the social questions most closely interesting to them. At present the great mass have no opportunities of any such good directions either from their parents, their immediate superiors, or from books. Were such a measure as that proposed above to become law, it would act on the mass, opening the door of communication with their minds, which can now be hardly said to exist, substituting for sottishness and obstinate prejudice the intelligence and the resources of reasonable men, and in the place of the present discomfort and moral disorder in their homes, diffusing comfort, self-respect, virtue, and happiness.

[*To be concluded in next week's Mining Journal.*]

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—T. G. PENGELLY, Cheshunt-terrace, Waltham Cross, H BROWN, Old-road, Enfield: Apparatus for straightening gun-barrels.—J. SMITH, Seaforth, S. A. CHEASE, Liverpool: Arrangement for obtaining and applying motive power.—I. PULS, Roxburg-terrace, Haverstock-hill: Distillation of bituminous matters and gas ta'.—H. D. JENCKEN, London: Electric telegraphs.—W. H. HARFIELD, Fenchurch-street, London: Windlasses.—C. A. SCHRADER, Finsbury-square: Instrument to be used in boring, for mining, and other purposes.—J. MACKINTOSH, North Bank, Regent's-park: Insulating telegraphic wires or conductors, and in apparatus employed therein, part of which apparatus is applicable to the manufacture of tubes from india-rubber.—T. HILL, Heywood: Machinery or apparatus for punching and shearing metals.—J. BLACK, Edinburgh: Improved mode or means of obtaining, applying, and transmitting motive power.—S. N. RODIER, 21, Oak Village, St. Pancras: Apparatus for regulating gas.—D. GRAHAM-HOPE, Manchester: Locomotive and other-steam-engines.—F. MATLEY, Paris: Apparatus for regulating the flow of gas, and for improving its illuminating power.—W. S. CLARK, Banbury: Reefing or furling sails from the decks of vessels (from L. B. Wakeman, Baltimore, U.S.)—W. ESSON, Cheltenham: Wet gas meters.—H. W. HART, Fleet-street: Application of gas to chandeliers.—F. J. EVANS, Westminster: Gas purifying.—W. E. NEWTON, Chancery-lane: Improvements applicable to vessels employed in the manufacture of glass or the melting of vitreous substances.—J. FOWLER, jun., Cornhill, R. BURTON, Kingsland-road: Arrangement of locomotives and other carriages, to facilitate their movement on common roads and other surfaces.—J. PLATT, E. HARTLEY, Oldham: Certain parts of machinery for preparing and spinning cotton, and other fibrous materials.—J. BRAZIL, JOSEPH MCKINNELL, Manchester: Indigo blue dye.—J. L. CLARK, C.E., F. BRAITHWAITE, C.E., E. PREECE, Bernard-street: Telegraph cables.—L. WIART, Cambrai, France: Mode of generating steam or heating water or liquids.—J. JOHNSON, Lincoln's Inn-fields: Construction of governors or regulators for steam-engines (W. W. W. Wood and John Rice, Philadelphia, Pennsylvania, U.S.)—W. ROSE, Hales Owen: Piling or combining metals to be used in the manufacture of arms and cutlery, and for other similar purposes.—W. PHELPS, Red Lion-square: Wet gas metres (H. P. Gengembre, Rock Island, Illinois, U.S.)—W. WARNE, Tottenham: Constructure of elastic pavement and linings for walls, and in the manufacture of elastic mats, brushes, and pads for packing furniture.—S. LAING, Millwall: Apparatus employed in the manufacture of gas.

DRILLING AND BORING METALS.—Messrs. Batho and Baner, Salford, arrange a vertical drilling carriage on a cross slide, which, in conjunction with a self-acting feed and reciprocating motion, enables them to admit objects of large diameters to be chucked and bored with great facility, and lake holes or slots to be drilled to a great depth; and by a peculiar arrangement of the said self-acting feed and reciprocating motions, the spindle being so near to the main slide, and the carriage in the most favourable position to resist the pressure of the drill, they give the drilling much greater stability than has been hitherto obtained.

CLARE'S BREAK AND COMMUNICATOR.—Mr. Clare, C.E., has recently patented some ingenious arrangements for stopping trains and signalising, the specification of which has been filed by Mr. Henry, patent agent, Fleet-street. On the front and back axles of the carriages are fitted blocks (held upright by brace bars) and band-wheels, surrounded by bands, connected at one end to the brace bar, and at the other to a lever, which is centered on the bar, and has fitted to it a chain, attached to a tube supported in the blocks, and conveniently coupled. By actuating toothed wheels at the break vans and tender, the chains winding on the tubes cause the levers to tighten the bands on their wheels, and stop the train. By contact of suitably arranged ratchets with the toothed wheels a variety of signals may be produced.

NEW RAILWAY CARRIAGE.—A carriage which differs essentially from all others now in use, inasmuch as it allows of the centre of gravity being lowered as much as required, independently of the wheels, and without hindering the action of the machinery necessary to form the train. The frame of the carriage is beneath the frame of the axle; any diameter is allowed to the wheel, without raising the vehicle. The principal dimensions of the carriage can be perfectly equal to those of any vehicle now in use. The space now allowed to the steps may be utilised for augmenting the useful weight of the vehicle.

SUPPORTING RAILS.—To prevent the under wearing surface of the double-headed rail from being injured by the chair, Mr. P. Ashcroft, engineer of the South-Eastern Railway, proposes to suspend the rail between supporting pieces, in the form of a compound wedge. It is obvious that an easy and silent road will be obtained, so that, irrespective of the greater economy, the invention is worthy of adoption.

HOMOGENEOUS METAL BOILERS.—Some experimental steam-boilers, manufactured from the recently-invented patent homogeneous metal plates have been turned out at Woolwich, and after a succession of trials, under a pressure of steam, it has been ascertained that the present plates are not capable of resisting the amount of steam power required for the experiments. The Lords of the Admiralty, desirous of profiting by the advantages which may probably result from the introduction of a less weighty species of material for the manufacture of ships' boilers, have ordered the inventor to supply plates of greater thickness and durability, for the purpose of carrying out a further course of trials.

POLISHED STEEL FRIGATES.—An order has been given by the French Government for six new screw frigates, of 900 horse-power each, two to be built at Rochefort, two at L'Orient, and two at some other port, each to be *blinché* or *cuirassé*, at the term now goes, with plates of polished steel, each weighing 22 cwts., 5 feet in length, 2½ in breadth, at a cost of 57*l.* each plate; these plates are to be inserted between the planks of every part of the frigates above high water mark, and will render them impervious to shot and shell. The iron hail storm will pour down on them in vain, *impavidum ferient mina*. Steel shot have been fired at the plates from long and short ranges in the Polygon at Vincennes, and they have sustained less injury than Ichabod Crane when the ghost threw its head at him in Sleepy Hollow; but the very source from which the Emperor will obtain the armour wherewith to encase his ships is another guarantee for peace. Even the French Government, with all the vast resources at command which so struck Sir Charles Napier, is compelled to apply to an English ironmaster, one Mr. Howard, to furnish those plates. The samples are 1 metre 70 centimetres in length, 75 centimetres broad, 10 centimetres thick; each will weigh 1248 kilogrammes, and will cost 1420 francs; and as the entire vessel above water-mark will be covered with these stupendous shields, the cost will be prodigious.

CAN RAILWAY COLLISIONS BE PREVENTED?—The late accidents from railway collisions have given an impetus to break inventors, and as it must be acknowledged that if collisions cannot be entirely prevented, their number may at least be materially reduced, all inventions calculated to obtain the object in view should be fairly and impartially tested. Upon a previous occasion we referred to an improved instantaneous break, patented by Messrs. Chambers and Champion, of Lynsted, and we learn that they have introduced a trifling additional improvement which entirely removes the defect observable on its first introduction. The invention has been tested on the North London Railway, for the past six months, and proved eminently successful. The guard has the screw arrangement as at present, but has, in addition, a power ten times greater than that of the present break. Any carriage already fitted with breaks can have the additonal power applied in a day. No efforts will be spared to bring the invention under the notice of those who have power to secure its adoption, so that if it prove as useful as it at present appears, the patentees will, doubtless, be speedily rewarded for their continued perseverance.

OBTAINING AND APPLYING COMPOUNDS OF NITROGEN.—Mr. W. E. Newton, for a correspondent, has patented some improvements in obtaining certain compounds of nitrogen to be applied in the composition of artificial manures, and for other useful purposes. The manufacture of artificial manures by decomposing phosphate of lime by means of sulphuric acid, and adding to the superphosphate of lime thereby produced various compounds containing nitrogen, such as nitrate of soda or of potash, and compounds of ammonia, together with other ingredients, has taken an extraordinary development within the last few years. In conducting this manufacture in the most economical manner, the manure manufacturer has found it desirable to prepare sulphuric acid for his own use. During the manufacture of sulphuric acid, as this is ordinarily conducted, it is requisite to employ certain compounds of nitrogen with oxygen, for the purpose of converting sulphurous acid into sulphuric acid. During such action, the compounds of nitrogen with oxygen employed are repeatedly converted from hyponitric acid into deutoxide of nitrogen by the action of sulphuric acid gas, and again from deutoxide of nitrogen into hyponitric acid by the action of atmospheric air. Such conversions are effected repeatedly as the gases employed pass through the apparatus in which sulphuric acid is being condensed, and the residual gases containing compounds of nitrogen with oxygen, in the state of deutoxide of nitrogen and hyponitric acid, are allowed to escape into the atmosphere, and become wasted. The inventor of the present improvements has discovered that if the said residual gases proceeding from the manufacture of sulphuric acid are conducted, together with a proper additional supply of atmospheric air, into suitable apparatus containing alkali or certain alkaline salts in solution, or alkaline earth, or certain salts of such earths moistened or mixed with water, the compounds of nitrogen with oxygen contained in such residual gases become absorbed and combine with the alkaline earth employed, and produce nitrates and nitrites equally valuable to be used in the composition of artificial manures as the nitrates usually employed, and when so used producing a great economy in the cost of such artificial manures. Such nitrates and nitrites may also be employed for other purposes, for which ordinary alkaline and earthy nitrates and nitrites are employed.

COAL v. COKE ON RAILWAYS.

From experiments that have been recently made on the East Lancashire Railway, it was proved indisputably that an immense saving may be effected by substituting coal for coke for locomotive purposes. But in all systems previously proposed the cost of applying the invention has been excessive, owing to the alterations required being so great. The consequence has been that the adoption of the proposition has been confined to new locomotives for replacing those worn out. The invention tried on the line between Manchester and Blackpool, and which is claimed by Mr. Lees, the locomotive superintendent of the East Lancashire Railway, is free from this objection, as it can be applied at the cost of only a few pounds per engine, and it is estimated that 1*l.* per annum will keep them in repair. The run from Manchester to Blackpool and back was well adapted for testing the merits of the invention; there being some severe gradients and sharp curves on the line. The estimated weight of the train was 271¾ tons, being rather in excess of the ordinary luggage trains of 30 to 34 wagons.

Amongst the gentlemen on the engine at various stages of the journey, to observe as closely as possible the working of the apparatus under trial, were Mr. Hardman Earle and Mr. Edward Tootal, directors of the London and North-Western Company; Mr. Ramsbottom, the able locomotive engineer of the same company at Crewe; Mr. Marshall and Mr. George Wilson, directors of the Lancashire and Yorkshire Company; Mr. Dugdale, Mr. Robinson Kay, and Mr. Riley, directors of the East Lancashire Company; Mr. Cawkwell, traffic manager; and Mr. Blackmore, superintendent of the passenger department of the Lancashire and Yorkshire line. Mr. Lees and Mr. Jenkins were, of course, present, and associated with them to test the value of the apparatus scientifically was Mr. B. Fothergill, the eminent consulting engineer, of Manchester. Mr. Fothergill had the entire charge of the experiment, having been engaged professionally by the company for that purpose, and to report to them upon a series of experiments of a similar kind in which he had been engaged for some months past.

One of the main tests being to ascertain the amount of saving effected by the use of coal instead of coke, it was necessary to weigh the fuel upon the tender, before commencing the journey, including the quantity used for getting up steam, and on the return of the train to ascertain the quantity left in the tender and unconsumed in the fire-box. By deducting the latter items, of course the nett weight of coal consumed would be ascertained to a sufficient nicety, and the cost per mile would then be easily calculated. An important point during the trip was also to see that the steam was kept at as nearly as possible an even pressure, and that time was not lost in ascending heavy gradients (to save fuel) to be compensated for by great speed on more favourable parts of the line, because irregularities of this kind might be a fruitful source of accident if adopted in the working of the ordinary traffic. The train left the station at Salford soon after twelve o'clock, and the journey to Bolton, a distance of ten miles, being rather a heavy ascent, was made in 35 minutes. The distance from Bolton to Preston, 20 miles, was run in 43 minutes, and the remaining 18 miles in 68 minutes. The journey back occupied a much longer period, through some unavoidable detentions caused by trains being in the way, by slipperiness of the rails from rain, and other circumstances adverse to the experiment in point of economy. The results of the trip, however, were most satisfactory, the total consumption of coal being only about 39 cwts. for the whole journey. The coal used was that of the Ince Hall Company, at Wigan, costing 5*s.* 3*d.* per ton, and hence the cost of the trip was about 10*s.* From experiments previously made, it was calculated that with coke, which costs 11*s.* to 11*s.* 6*d.* per ton, the expense of taking the train the same journey would have exceeded 20*s.* In two previous trials made by Mr. Fothergill, one with coal, the other with coke, over the same line, weather and circumstances being equally favourable to each, the cost was 9*s.* 5*d.* for the experiment with coal, and 1*l.* 2*s.* 3*d.* for that with coke. There seems to be no doubt, therefore, of the advantage of using coal in point of economy.

The experiment as to the smoke-burning apparatus was also highly satisfactory. The great object, to attain this end is the proper admission of atmospheric air into the fire-box, and Mr. Lees accomplishes it in a very simple and inexpensive manner. An opening is effected in the lower part of the door of the fire-box by an adjustible plate, and the admission of air can be regulated as desired. Inside the door is a hood, closed at the top, over the aperture, which acts as a deflecting plate to the atmosphere when admitted, and forces it down upon the fire. Nearly at the far end of the fire-box is an arch across it, composed of fire bricks or tiles. The effect of the brick arch is that, becoming red hot, it throws back the products of combustion, and thus produces a better mixing of the gases. If more desirable, the brick arch, or mid-feather, might be constructed of copper, with a water space, increasing the heating surface of the boiler. The invention has given such satisfaction that only two of the East Lancashire Company's locomotives are without it. One great consideration which should induce the adoption of some form of smoke-consuming apparatus, so that they may burn coal instead of coke, is that the wear and tear of the fire-box and tubes is much lessened by the use of coal. During the experiments Mr. Fothergill stated that the average duration of a set of tubes with coke would not exceed 94,000 miles, whilst with the use of coal he had seen a set in use, and apparently not half worn out, after travelling 156,000 miles. The average with coal would probably reach 300,000 miles. The best kind of fuel yet tried during the experiments to the present time is said to be the Horbury coal. An experiment with Welsh smokeless coal entirely failed, the bars of the fire-box got clinkered over, so that the engines could not proceed.

On Tuesday an experimental trip was made over the same line of rails with the same train, but drawn by a locomotive having the smoke-burning apparatus invented by Mr. Jenkins, of the Lancashire and Yorkshire Company. This invention, which has been generally adopted by that company, is rather more expensive in its application than that of Mr. Lees, though of very small cost, but it is also very effective. Mr. Jenkins admits atmospheric air into the fire-box through a number of tubes in front of the fire-box, and underneath the boiler; and the outer part of the fire-box is furnished with a sliding plate, which can be worked by the engine-driver at pleasure, so that during the time of adding fresh fuel to the fire, by moving the plates the tubes are uncovered, and a good supply of oxygen is ensured. He has also a perforated deflecting plate across the fire-box to ensure a better combustion of the gases, and prevent the escape of non-consumed carbon. Both inventions will probably attract the attention of other companies after such satisfactory results, the subject being one which is now beginning to excite a good deal of interest in the railway world.

NORTHAMPTONSHIRE IRONSTONE.—There is more ironstone now being sent out of this county than was ever previously known, and this fact seems to indicate an improvement in the iron trade. Large quantities of stone are daily being sent from the Gayton Stone Works to Wales and Staffordshire, and it seems somewhat singular that just as the mineral treasures of Staffordshire are showing indication of exhaustion this immense tract of ironstone in Northamptonshire is being developed. We are informed that the finest description of pig-iron is made from this ore.

Mr. William Brown, of Heyford Iron-works, near Weedon, in writing to the *Engineer*, says:—"The ore of this county is percolating in vast quantities, not only into Derbyshire and Staffordshire, but also into Wales. It does seem to me to be quite a providential arrangement—that just as the extensive mines in Staffordshire are being drained of their mineral treasures the vast resources of this county appear, as if to fill up their place. When this ore was first utilised, some few years ago, vast numbers of persons came here, examined the stone, shook their heads, said it would never be of any worth, and went home again. Now that good iron, and iron second to none, can be made from this ore is an established fact, and may be proved any day by a visit to these works. If the stone were not very rich, containing, as it does, 40 per cent. (I speak of that from Gayton, near Blisworth, that being what I am using), it would never succeed as a commercial enterprise to make iron in this county, and for this reason, that fuel is very expensive, owing to the carriage. Should coal ever be found to exist in this locality, this county would stand pre-eminent as a vast iron-making district. The stone requires no calcination before being put into the furnace, and I find that it seldom, if ever, takes more than 500 cwts. to make a ton of iron. The iron made possesses properties peculiar to itself. It is immensely strong, possessing toughness with softness, and is well adapted for castings of almost every description. Castings made from it have a smooth face, and require little "fetling" afterwards. For machinery castings it is very suitable, as it turns well in the lathe. For forge purposes it is equally good, giving a good yield, and making the finest description of iron. The stone is readily fused, and this will be the more apparent when I say that I have actually made iron in a common tobacco-pipe in a drawing-room fire."

GOVERNMENT SCHOOL OF MINES, AND OF SCIENCE APPLIED TO THE ARTS.

DIRECTOR—Sir RODERICK IMPEY MURCHISON, D.C.L., M.A., F.R.S., &c.

During the Session 1858-59, which will COMMENCE on the 4th October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given :—

1. CHEMISTRY ..... By A. W. HOFMANN, LL.D., F.R.S., &c.
2. METALLURGY ..... By JOHN PERCY, M.D., F.R.S.
3. NATURAL HISTORY..... By T. H. HUXLEY, F.R.S.
4. MINERALOGY ..... } By WARINGTON W. SMYTH, M.A., F.R.S.
5. MINING ..... }
6. GEOLOGY ..... By A. C. RAMSAY, F.R.S.
7. APPLIED MECHANICS .. By ROBERT WILLIS, M.A., F.R.S.
8. PHYSICS..... By G. G. STOKES, M.A., F.R.S.

INSTRUCTION IN MECHANICAL DRAWING, by Mr. BINNS.

The fee for Matriculated Students (exclusive of the laboratories) is £30, in one sum, on entrance, or two annual payments of £20.

Pupils are received in the Royal College of Chemistry (the laboratory of the school), under the direction of Dr. Hofmann, at a fee of £10 for the term of three months. The same fee is charged in the Metallurgical Laboratory, under the direction of Dr. Percy. Tickets to separate courses of lectures are issued at £1, £1 10s., and £2 each. Officers in the Queen's or the East India Company's service, Her Majesty's Consuls, acting mining agents and managers, may obtain tickets at reduced charges.

Certificated schoolmasters, pupil teachers, and others engaged in education, are also admitted to the lectures at reduced fees.

His Royal Highness the Prince of Wales has granted Two Exhibitions, and others have also been established.

For a prospectus and information, apply at the Museum of Practical Geology, Jermyn-street, London. TRENHAM REEKS, Registrar.

ROYAL CORNWALL POLYTECHNIC SOCIETY.—

The TWENTY-SIXTH ANNUAL EXHIBITION of the above society will take place on Wednesday, Sept. 29th, and following days, when PRIZES will be AWARDED in the following departments:—MECHANICAL INVENTIONS, NAVAL ARCHITECTURE, FINE ARTS, NATURAL HISTORY, STATISTICS, PLAIN AND FANCY WORK, and SCHOOL PRODUCTIONS.

Objects intended for exhibition or competition must be sent, carriage paid, to the Polytechnic Hall, Falmouth, between the 20th and 25th of September, inclusive.

N.B.—By a recent arrangement of the committee, patented or registered articles are no longer excluded from prizes in medals.

For further particulars, application may be made to Mr. SYDNEY HODGES, Falmouth.

TO CAPITALISTS DESIROUS OF A SAFE INVESTMENT.—

TO BE SOLD, OR LET, the valuable and extensive COAL and CULM MINES of DROMINAGH, situate within six miles of the Kanturk and Millistreet stations of the Killarney Junction Railway, in the barony of Duhallow and county of Cork. The culm, for which there is a very great demand, is of the most superior quality, and its supply is more than sufficient to last for centuries. Labour is abundant and cheap, and a highly profitable and remunerative trade may be carried on at a moderate outlay.—Particulars as to terms and title may be obtained by application to DENIS MCCARTHY, Esq., Rathroe, Millistreet; or MICHAEL CALLAGHAN, solicitor, 7, Middle Gardiner-street, Dublin, and 62, Grand Parade, Cork.

ALVENNY MINING COMPANY (LIMITED).

Capital £17,000, in 17,000 shares of £1 each.
To be fully paid upon allotment.
SECRETARY—Mr. J. D. Brunton.

OFFICES,—40, KING WILLIAM-STREET, E.C.

This company is formed to work three contiguous mining setts, known as Alvenny, Fox Tor, and Red Hill. The Alvenny sett is known to be of great value, having produced £30,000 worth of tin at and above the adit level. It is well known that rich leaders of tin have gone down below the adit, but as the mine has been worked hitherto without machinery, these leaders could not be followed in consequence of the water. The ground is easy and inexpensive, and a steam-engine of 40-in. cylinder would sink the mine to a depth of 150 fms. The lode averages 3½ ft. in width, and an adit has been driven upon it for about 250 fms. Numerous adit shafts have been sunk, any of which may be made available for more extended workings.

In the Fox Tor sett, four shafts have been sunk 10 fms. each, and one 16 fms. About 300 fms. have been driven at adit and in the 10 fm. level, and these drivings have produced about £2000 worth of tin, Excellent ground has thus been laid open, which will let at from 5s. to 6s. in 1l. tribute as soon as the water is pumped out. There are four or five tin lodes in the sett, but only one has yet been wrought. This sett can be very economically worked, there being sufficient water-power for stamping and crushing.

The Red Hill sett is situate at the eastern extremity of the Alvenny and Fox Tor boundaries. All the lodes which pass through these two run directly through the Red Hill sett, and ensure valuable working for many years to come.

The principal part of the dead work is already done, and the mines are laid open so as to ensure immediate returns.

The lease is granted for the unusually long period of 40 years, at a royalty of 1-15th, with a dead rent of £50 per annum. And for this, and the £15,000 value of work already done, together with the buildings and plant upon the mines, an agreement has been entered into with the lessees to assign the lease to the company for the consideration of £7000 to be paid to them, with £6000 of which they undertake to subscribe for and pay upon 6000 shares. Of the remaining 11,000 shares it is proposed to issue only 6000 at present, as it is anticipated that their value will be greatly increased by the success of the mines, before the proceeds of the remaining 5000 will be required; and when they are issued the then existing shareholders will have the option of taking them *pro rata*, at par. Operations will be commenced as soon as 3000 shares are subscribed for.

Full prospectuses, with reports and forms of application, can be obtained of the secretary, at the offices of the company.

THE LLYWERNOG UNITED MINING COMPANY (LIMITED).

Registered under the Joint-Stock Companies Acts, 1856-57.
Capital £12,000, in 8000 shares of £1 10s. each.—Deposit 10s. per share.

DIRECTORS.

JAMES MILLER, Esq., Marine-terrace, Aberystwith.
ROWLAND EVANS, Esq., Pier-street, Aberystwith.
EDWARD J. LLOYD, Esq., Great Dark-gate-street, Aberystwith.
JOHN JONES, Esq., Princess-street, Aberystwith.
EDWARD MEDD, Esq., Long Sutton, Lincolnshire.

BANKERS—North and South Wales Bank, Aberystwith Branch; National Provincial Bank of England, Aberystwith Branch.
AUDITOR—Mr. Job Morgan, North Parade, Aberystwith.
SECRETARY—Mr. Richard Watkins, North Parade, Aberystwith.
MANAGING AGENT—Capt. John Hughes, Talybont, Aberystwith.

OFFICES,—42, NORTH PARADE, ABERYSTWITH.

PROSPECTUS.

The mines worked by this company comprise the Llywernog, Bog, and Ponterwyd Sliver-Lead Mines, in the parish of Llanbadarnfawr, in the county of Cardigan, 11 miles from the seaport of Aberystwith,—the mail road from this town to Kington passing over a part of the mines. The setts are held under a lease for 21 years, granted by the late Pryse Loveden, Esq., M.P., of Gogerddan, at 1-14th dues.

These valuable mines are situated in the richest argentiferous lead-bearing district in the Principality. By referring to the Geological Map of Wales, in the Museum of Geology, Jermyn-street, London, it will be seen that at Blaen-Llywernog there are more lodes delineated thereon as intersecting these grants (with one or two exceptions) than there are on any mine in the county. Goginan, Cefn Cwm Brwyno, and other well-known mines, are within a distance of three miles. The lode of Cefn Cwm Brwyno runs through the very centre of Llywernog.

Up to a recent period these mines were in the possession of parties residing at a distance from the scene of operations, who were unable to bestow that constant personal supervision which is so essential to the efficient working of a mine. The interests of those parties have lately been purchased by residents in the neighbourhood of the works, who, by attending carefully to the proceedings on the mine, are confident it will ultimately be a very profitable investment.

These mines cover an area of 700 acres of land, on which five engine-shafts have been sunk, and three adit levels driven. The surface buildings comprise an agent's residence, office, powder magazine, carpenters and smiths' shops; the machinery, two water-wheels, two horse-whims, and a crusher. There is also a good supply of pumps, &c., on the mines, and a great abundance of water-power obtainable at all seasons.

The Llywernog and the Bog are old mines, from which thousands of pounds worth of ore have been returned. Discoveries of good deposits of ore have lately been made, and good ore bargains are being worked at present. At the Ponterwyd Mine, in the eastern shaft, there is a rich mass of ore in view, which, at a few fathoms more in depth, is expected to improve still further. In the boundary shaft, adjoining the Clara Mine, they are working upon a strong lode of lead, yielding large blocks of rich ore.

The present proprietors having expended £7500 in sinking shafts, driving levels, erecting machinery, &c., and, as an equivalent, reserve to themselves 3584 shares, Class A, fully paid-up, and 2048 shares, Class B, with 15s. paid; and, being desirous of prosecuting the works upon a scale commensurate with the importance of the undertaking, submit to the public 2368 shares, Class C, the proceeds of which, together with the calls payable on Shares B, will be entirely available for the future working of the mines. From the present prospects it is confidently expected, if all the shares for disposal are taken up in a short period, the 10s. per share deposit will be ample to place the mines in such a position as to enable the company to commence paying dividends out of profits to the proprietors. RICHARD WATKINS, Sec.

Applications for shares to be made to the directors. Prospectuses, reports, and a map of the mine, may be had of RICHARD GEDDES, Esq., 60, Gracechurch-street, E.C.; or at the company's offices.—September 6, 1858.

COMPULSORY REGISTRATION OF JOINT-STOCK COMPANIES.
Now ready, price 4s., the Second Edition of

TAPPING'S EXPOSITION OF THE JOINT-STOCK COMPANIES ACTS OF 1856 AND 1857.

Designed as a PRACTICAL GUIDE for the Promoters, Directors, Shareholders, Solicitors, Secretaries, Officers, and Creditors of all kinds of Joint-Stock Companies.
Containing a Clear Exposition of the recently passed JOINT-STOCK COMPANIES ACT, 1857.

Also, full Directions for the Formation, Registration, and Incorporation, of Joint-Stock Companies, together with the Authorised Regulations for Management of the same, and all necessary forms.

By THOMAS TAPPING, Esq., Barrister-at-law.
Author of the *Readwin Prize Essay on the Cost Book System*, &c., &c.
London: *Mining Journal* office, 26, Fleet-street; and all booksellers.

GEOLOGICAL MAP OF THE TAVISTOCK MINING DISTRICT;

to be published in the best style of Chromo-Lithography.
The MAP to comprise the ENTIRE SERIES of MINES, with their BOUNDARIES, between the TAMAR RIVER and the LYDFORD, supposed to extend 12 square miles.

This work has long been required by the public, and will be carried out with the skill and ability experience only can command. The scale is proposed to be 12 chains to the inch; the size of the map will, therefore, be convenient.

The copies will be delivered in the order of subscription, at One Guinea each. Subscribers, therefore, if desirous of obtaining early impressions, will oblige the publisher by forwarding their names.

Attested copies may be secured by a post-office order for 5s. at the time of subscribing, and the remaining 16s. per copy to be paid at the time of delivery.

Subscriptions received by Mr. CHARLES WILLIAMS, Tavistock, Devon, the publisher; or at the *Mining Journal* office, 26, Fleet-street, London.

MINE TO LET.—HEMERDON CONSOLS, DEVON,

within six miles of Plymouth, and two of the Plympton station South Devon Railway.—For particulars, apply to W. J. WOOLCOMBE, solicitor, 13, Princess-square, Plymouth.

N.B.—The valuable engine and machinery on the above mine being advertised for sale on the 24th inst., the taker of a sett will have the opportunity of purchasing the same in place.—Dated Plymouth, September 9, 1858.

COPPER MINE.—TO LET, on Loch Fyne, near Tarbert.

Advertised in 1857, then unexplored. It can now be seen opened up. Assay or test, 26½ per cent. The surface for 1000 feet shows the yellow and green carbonate, unmistakeable evidence of the large extent of the deposit. Water-power to any extent is at hand.—Apply to the proprietor, W. FORLOSS, Esq., of Erins, near Tarbert, Loch Fyne.

BLAST FURNACES FOR SALE.—TO BE SOLD, TWO

BLAST FURNACES, with two 45-horse power engines, the whole nearly new, for the low sum of £2500, situated where coals and ironstone are cheap, and of first-class quality; and a good market for iron at high prices.

FOR SALE, an excellent 22 in. ROTARY ENGINE, 10 ft. stroke

in cylinder, with winding cage and 9 tons boiler, complete. Also, one 36 in. smiths' bellows, and an excellent set of screwing tools. The engine is so constructed as to be used for pumping or crushing, if required.—To treat for the purchase, apply to WILSON FORSTER, 36, Dale-street, Liverpool; or GEO. RICKARD, Great Onslow Consols, Cameiford.

FOR SALE, OR HIRE, TWO 12-in. WINDING and PUMPING

ENGINES, ONE 9-in. PUMPING ENGINE, on strong wood frames for portability. BOILER with fittings, 4 tons (nearly new). Also, a 20 fms. 7-in. DRAWING LIFT complete, at 6s. 3d. per cwt.—Apply to J. S. PHILLIPS, Engineer, &c., Marazion.

FOR SALE, a 24 in. WHIM HORIZONTAL ENGINE, with a

10 tons boiler, nearly new, in excellent condition, and drawing machine attached As this engine is very superior in make and condition, parties requiring one will do well to examine it.—Apply to Mr. C. WESCOMB, 21, Southernhay, Exeter.

STEAM-ENGINES AND WATER-WHEEL, &c., FOR SALE.

—A 32 in. cylinder CONDENSING PUMPING ENGINE, 9½ ft. stroke, cylinder quite new, with cylinder case; boiler 11 tons, and outfit complete.

A 14 in. cylinder HORIZONTAL DOUBLE CONDENSING PUMPING ENGINE, 5 ft. stroke, with a 5 ton boiler complete.

A 11¼ in. cylinder HIGH-PRESSURE TABLE ENGINE, with metallic piston, wrought-iron fly-wheel shaft, and 11 ft. diameter fly-wheel.

A WATER-WHEEL, 35 ft. diametr, 3½ ft. breast, oak axle and rings, two cranks, saddles and brasses; one 13 in. doorpiece, one 13 in. working barrel, one 11 in. ditto, various pumps and windboxes. Also, a good balance-bob and shaft bob.

The above machinery is in very good condition, and will be sold cheap.—For further particulars, apply to Mr. W. B. HARVEY, Tavistock, Devon.

TO CAPITALISTS.—TO BE LET, the ROYALTIES of a

highly MINERALISED PROPERTY in the county Donegal, containing about 2000 acres. The estate makes boundary with a very productive Silver-Lead Mine, the lodes of which pass through the extent. Terms most liberal.—Apply to Messrs. PARROTT and Co., 3, Dame-street.

BRYNTAIL COAL TO BE LET.—This vein of coal is 4 feet in

thickness. It is the Red Ash coal vein, well known in the market under the name of the Mynydhysioyne Maes Mawr, Lantwit, and Gellygner vein. The pit where it has been discovered and proved to exist in abundance is 7 fms. only, through shale, fire-clay, and ironstone, rising at a very small angle to the north-east and north-west. The level to this pit will be about 50 yards in length, through the coal, from the surface. The extent of the coal field workable through this level is about 700 acres. The distance from the Glamorganshire Canal is less than half a mile; from the port of Cardiff, eleven miles; and from the Trefurest station on the Taff Vale Railway, one mile. Mr. W. H. Harrison, the well-known mineral engineer, estimates the total cost of working out 100 tons of coal daily to the market, within nine months from the time the works will be commenced, at £1334.

All the other subsisting measures of coal, ironstone, fire-clay, and limestone, in the South Wales mineral formations, are workable by level from a lower elevation, from the same estate, where there is an excellent situation to erect blast furnaces.

Further particulars as to terms of letting may be known on application to JOHN GRIFFITHS TRENERRY, Esq., 1, Nicholas-street, Bristol; Messrs. THOMAS WHITE and SONS, 11, Bedford-row, W.C., London; and Dr. WILLIAM PRICE, of Craigalfa, Glamorganshire.

TO LET, a LARGE IRONMOULDERS' SHED, 120 ft. long and

25 ft. wide, erected at the HEYFORD IRON-WORKS, near Weedon, where a large contract for chairs for the London and North-Western Railway Company has recently been completed. There are two cupolas, each of which is capable of turning out 50 or 60 tons of iron per week. The chairs were made from the pig-iron manufactured on the premises, which is peculiarly adapted for this work, and for castings of any description. The Heyford Iron Company will contract with any persons taking the building to supply them with pig-iron at the market price. This locality offers peculiar facilities for doing a large London trade, or for carrying out heavy contracts for chairs, large pipes, &c., as the works are well situated for delivering goods and receiving the same, being bounded on one side by the London and North-Western Railway, from which line there is a branch into the works; and on the other side by the Grand Junction Canal.—Further particulars may be known upon application to the HEYFORD IRON COMPANY, near Weedon.

Heyford Iron-Works, Sept. 8, 1858.

MINERALS TO-BE LET IN THE COUNTY OF NORTHUMBERLAND.

TO BE LET, for such a term of years as may be agreed on, the

IRONSTONE, COAL, and MINERALS on the STEEL ESTATE, and part of BROOMHOPE ESTATE, adjoining thereto, situate near Bellingham, in the parish of Birtley, and extending over 800 acres or thereabouts. The ironstone has been proved of very considerable extent and richness, and the estate also contains coal, limestone, and fire-clay. The Border Counties Railway, now in course of formation, and which joins the Newcastle and Carlisle Railway at Hexham, will, when completed to Bellingham, form an easy means of communication with this mineral field, and afford great facilities of transit, being only about two miles from the Steel Estate, from whence a branch line could be easily made.

For further particulars, apply to Mr. GEORGE BOLAM, Westgate-street, Newcastle-upon-Tyne. Mr. JOHN DAVISON, the tenant at the Steel, will show the estates.

Newcastle-upon-Tyne, September 9, 1858.

TO BE LET, OR SOLD, a valuable MINE of IRON ORE, on the

western side of the FOREST OF DEAN, near Mr. Mushet's Steel Works. Five miles by tramway already made to Lydney, a seaport; also a station on the South Wales Railway. It is workable by level, opened at a great expense, containing about 100,000 tons. The ore is of the best quality for improving the strength and toughness of iron, containing more lime than the mines on the eastern side, averaging from 30 to 40 per cent. of iron, and is used in the proportion of one-third. It is also excellent for Staffordshire iron. Mr. Blakewell is the owner of a rich mine in the same division of the forest. Messrs. Crawshay and the Dowlais Iron Company have used the Forest ore on the east side for many years, with great benefit. Such is the importance of mixing ores, that large quantities are even imported from the Isle of Elba, Whitby, and elsewhere.

Terms for letting:—£200 per annum; royalty, 1s. per ton beyond this amount. Cost, including carriage to Lydney, 6s. per ton; freight to Newport or Cardiff, 4s. per ton.—Apply to Mr. RICHARD CORT, 9, Hemingford-terrace, Barnsbury-park, Islington, London.

TO LET, the COAL, IRONSTONE, and FIRE-CLAY, under

lands in the GWENDRAETH VALLEY, SOUTH WALES, belonging to Lieut.-Colonel S. Cowell Stepney, consisting of SEVENTEEN SEAMS OF COAL, varying in thickness from 2 to 9 ft.; numerous SEAMS of IRONSTONE, with ONE SEAM of BLACKBAND, about 16 in. thick.

The Gwendraeth Canal passes through the property, and leads to the South Wales Railway, as well as to the ports of Kidwelly and Pembrey; the latter port being about eight miles distant, and having a floating dock capable of accommodating vessels of 500 tons and upwards.—For further particulars and to treat, apply to CHARLES BERKELEY, Esq., solicitor, 52, Lincoln's Inn-fields, London; or to WILLIAM ROSSER, Esq., mining engineer, Llanelly, South Wales.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale :—

REFINED METALLIC NICKEL.	OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET,

NICKEL AND COBALT ORES PURCHASED.

TAMAR SILVER-LEAD MINING COMPANY.—Notice is hereby

given, that the ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at their offices, No. 17, Gresham-street East, London, on Monday, the 4th day of October next, at Two o'clock, P.M., precisely.

Dated Sept. 1, 1858. By order of the Board, F. GEORGE, Sec.

SOUTH AUSTRALIA.—ROYAL MINING COMPANY.—

Notice is hereby given, that the directors of the Royal Mining Company of South Australia have this day made a CALL of ONE SHILLING PER SHARE on all shares in this company. That such call is made payable at the office of the company, King William-street, Adelaide, on every Tuesday and Thursday, from the 1st July to the 31st December, 1858, between the hours of Eleven and One o'clock. All scrip requiring to be transferred must be left for one week at the office of the company.

Notice is hereby further given, that all shares not paid up by the 6th January, 1859, will be absolutely forfeited. By order of the Board of Directors,
May 18, 1858. NATHANIEL SUMMERS, Sec.

COPIAPO AND CALDERA RAILWAY.—Notice is hereby

given, that the next QUARTERLY DIVIDEND of 4 per cent. will be PAYABLE on the shares of the above company to the holders of shares registered in England, at the banking house of Messrs. Williams, Deacon, and Co., on and after 19th October next.

By order, EDWARD J. COLE.
Office of Registry and Transfer, 2, New Broad-street, August 17, 1858.

COPIAPO EXTENSION RAILWAY COMPANY.—Notice is

hereby given, that the directors have made a CALL of ONE POUND PER SHARE, making, with instalments already paid, the sum of £6 per share, payable at the banking house of Messrs. Williams, Deacon, and Co., on or before the 15th day of September next.

The scrip certificates, together with the bankers' receipt, must be left at the offices of the company, No. 2, New Broad-street, to have the call inscribed thereon.

The interest for the six months, ending 31st July last, will be paid at the same time.

By order of the Directors, EDWARD J. COLE, Sec.
London, August 17, 1858.

UNITED STATES OF AMERICA.—DUPEE, BECK, and

SAYLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and SALE of STATE, CITY, and RAILROAD SECURITIES, MANUFACTURING, and BANK SHARES, give particular attention to the MINING COMPANIES OF LAKE SUPERIOR, and furnish reliable information concerning them.

[DUPEE, BECK, and SAYLES refer to the Editor of the *Mining Journal*.]

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

PURSUANT to TWO several ORDERS, or DECREES, made in the Causes of— TONKIN AND OTHERS v. HOOPER.
RICHARDS AND OTHERS v. JANE.

The CREDITORS in respect of WHEAL THOMAS MINE, in the parish of Perranzabuloe, within the said Stannaries, are, on or before the 22d day of September inst., to COME IN and PROVE THEIR DEBTS before the Registrar of the said Court, at his office in Truro, or in default thereof they will be excluded the benefit of the said two several Decrees.—Dated Registrar's Office, Truro, the 8th day of September, 1858.

IMPORTANT SALE AT THE PENYRHENBLAS MINE, NEAR HOLYWELL, FLINTSHIRE.

MR. JAMES WILLIAMS has the pleasure to announce that he is favoured with the instructions of the proprietors to DISPOSE OF, BY PUBLIC AUCTION, on the said premises, on Tuesday, the 14th of September, 1858, commencing at Eleven for Twelve o'clock precisely, the whole of their valuable PLANT and MATERIALS, POWERFUL STEAM-ENGINE AND APPENDAGES, TOOLS, IMPLEMENTS, and an extensive variety of miscellaneous articles of use, comprising—

An excellent 45 in. cylinder CONDENSING STEAM ENGINE, 7 ft. stroke of piston, with two cylindrical boilers, each 33 ft. long by 5 in. diameter, replete with steam case, regulating valves and connecting pipes, &c.

Powerful 8 arm capstan, shears and rope; balance bob, with 24 yards connecting rods in shaft; 39 pieces of 11 in. pumps, each 9 ft. long; 13 of 12 in. ditto ditto, and one ditto of 4½ ft. long; plunger pole and case, 11 in.; H piece and windbore complete, one doorpiece, 11 in. barrel and windbore; about 110 yards of main rods, 10½ in. square, with plate and pins complete; about 45 yards of pump rods, with ditto for drawing lift ditto; cistern for plunger lift, strong stapics for plunger pole, drawing lift and set off complete; set of plates for T bob, with carriage complete; three buckets for 11 in. barrel, clack seats and shells, pump rings and pins, pair of capstan pulleys, pair of strong yokes, door clack pieces, working barrels and windbores of various dimensions, match pieces and pumps; about 400 yards of 2½ and 2 in. wrought-iron rails, and chairs for ditto; about 300 yards of flat-rods; scrap, cast, and wrought-iron; pulleys of various sizes, cast-iron wheels for wagons, three winches, eight new iron wagons and kibbles, whimseys complete, sets of chain for ditto and heavy work, air machine, new and second-hand wheel-barrows, carpenters' bench and tools, smithy tools and implements, jack block, stretching screw, large bell, a quantity of wooden railing, useful boards and timber, sundry office furniture, &c.

Also, the COMPANY'S INTEREST IN THE MINING GROUND (embracing about 170 acres), held under a lease granted by the Marquis of Westminster, at a moderate royalty, for an unexpired term of ten years.

Descriptive catalogues of the whole will be published, and may be had five days prior to the sale, with any further information, by applying to Mr. THOMAS HUNT, at the mine; or to the auctioneer, at his office, Maes-y-dre, Holywell.

HEMERDON CONSOLS MINE.
TO MINE AGENTS, ENGINEERS, MANUFACTURERS, IRONFOUNDERS, AND OTHERS.

MESSRS. CLEMENT AND CO. WILL SELL, BY AUCTION, at the HEMERDON CONSOLS MINE, situate in the parish of Plympton St. Mary, Devon, on Friday, the 24th September inst., all that extensive and valuable MINING PLANT, MACHINERY, MATERIALS, &c., comprising—

ONE ROTARY STEAM-ENGINE, 32 in. cylinder, with machinery for pumping, hauling, and stamping, viz.:—Crank for pumping, cast-iron cage for hauling, 12 heads of stamps, and cast-iron axle for stamping.

1 balance-bob, 1 travelling or angle ditto, 1 shaft ditto.
About 30 fms. of 2½ in. iron rods, from engine to shaft, for pumping.
18 fms. of 8 in. wood rods.
1 18 fm. 9 in. plunger lift, with 9 in. column.
1 12 fm. 8 in. drawing lift, with 9 in. column.
1 10 fm. 7 in. drawing lift, with 8 in. column.
About 30 fms. of 1½ in. bucket rods, 40 rnds. ladders.
A quantity of chain of different sizes, shaft door, 5 large iron kibbies, 12 pulleys and stands for hauling purposes, 6 ditto for flat rods, about 40 fms. of 1½ in. flat rails, 1 iron tram wagon, and 1 horse whim, complete. [complete.
1 8 ft. wheel, with 2 large round buddles, Dressing tools of all descriptions.
1 small buddle, 1 rack, stamps dregs, 7 kieves, a quantity of launders.
1 tin chest, smiths' bellows, 1 anvil, 1 screwing stocks complete, with a lot of screws and taps, smiths' tools, ditto cupboard, a quantity of old and new iron, miners' tool chest, miners' tools, ditto chests, and 1 large saw.
A quantity of old and new timber.
1 pair of large iron blocks, 1 small pair of wood ditto, 1 lifting jack, 1 vice.
1 large pair of scales and stand, 1 small ditto, with a quantity of weights.
1 large grindstone.
Tackle and other ropes,

Counting-house furniture, consisting of 1 large stove, 3 grates, and other articles. A quantity of spare materials, such as stamp heads, ditto tongues, pulleys, zinc pipes, grease, oil, hemp, nails, hilts, a quantity of red lead, &c. A quantity of wire, such as bell wire, fencing ditto. Knocker line, &c., poppet heads. Sale to commence at Eleven o'clock.

The whole may be viewed prior to the sale, by application to Capt. ANTHONY PRIOR, on the mine; and for further particulars, apply to Mr. BAYLY, solicitor, Commercial-road, Plymouth.—Dated Plymouth, September 6, 1858.

SALE OF NEW AND VALUABLE HIGH-PRESSURE HORIZONTAL STEAM-ENGINES.
TO CORNISH AND OTHER MINERS, MANUFACTURERS, CONTRACTORS, EXPORTERS, AND OTHERS.

MESSRS. PAGE AND CAMERON beg respectfully to announce that they have received instructions to SELL, BY AUCTION, about the latter end of September, a truly valuable lot of new HIGH-PRESSURE and HORIZONTAL STEAM-ENGINES, by first-class makers, direct from the workshops of the proprietors, comprising—

ONE of 50 horse power, 24 in. bore of cylinder, with equilibrium valves.
TWO of 38 horse power, 20 in. bore of cylinder, with equilibrium valves.
TWO of 28 horse power, 17 in. bore of cylinder, with slide valves.
ONE of 24 horse power, 16 in. bore of cylinder, with slide valve.
ONE of 19 horse power, 14 in. bore of cylinder, with slide valves.
ONE of 14 horse power, 12 in. bore of cylinder, with slide valves.
And ONE of 10 horse power, 10 in. bore of cylinder, with slide valve.

The whole of the engines are bright, mounted on strong massive foundation plates, fitted with the best wrought scrap iron shafts and brass heads, and although specially made for mining purposes are equally well adapted for manufacturing or any other purpose to which an engine may be applied.

May be viewed on and after the 20th September, and any further information had of Messrs. PAGE and CAMERON, auctioneers and surveyors, 64, Old Broad-street, London, E.C., and St. Alban's, Herts.

EXTENSIVE IRON-WORKS IN SCOTLAND FOR SALE.
UPSET PRICE REDUCED.

THERE WILL BE EXPOSED TO PUBLIC SALE, within the

Faculty Hall, St. George's-place, Glasgow, on Wednesday, the 22d day of Sept., 1858, at Two o'clock afternoon, the extensive and valuable IRON-WORKS, known formerly as the Nithsdale Iron-Works, and now as the NEW CUMNOCK IRON-WORKS, situated in Ayrshire, and within two miles of the New Cumnock station of the Glasgow and South-Western Railway, with which they are connected by a branch line, and consisting of THREE BLAST FURNACES, lately erected, upon the most improved principles; TWO BLOWING ENGINES, condensing and working expansively, with steam cylinders 45 in. diameter, and blowing cylinders 100 in. diameter, 9 ft. stroke, capable of blowing seven furnaces; and the requisite other PLANT and MACHINERY for carrying on the works on a large scale; and with WORKSHOPS, a FOUNDRY, COUNTING HOUSE, DWELLING HOUSES for MANAGER and AGENTS, WORKMEN'S HOUSES, &c.

The furnaces and all the buildings are erected on feued ground, of which there are about 30 acres. There is an abundant supply of ironstone, coal, and other minerals in the immediate neighbourhood of the works, and it is thought that leases of these could be arranged with the proprietors on favourable terms for a purchaser. The Glasgow and South-Western Railway affords ready and cheap means of transit to the various shipping ports in the Firth of Clyde, as well as to Glasgow on the north and England on the south. Immediate entry can be given.

For further particulars, apply to the liquidators of the Western Bank of Scotland, Glasgow; HAMILTON ROSE, writer in Cumnock, Ayrshire; WALTER MACKENZIE, accountant in Glasgow; JAMES ALLAN, writer, Glasgow; or to BANNATYNES AND KIRKWOOD, writers, Glasgow, in whose hands are the title deeds and articles of roup. WILLIAM M'CRAE, residing at the Bank Cottages, near the works, will show the works.

TO BE SOLD, BY PRIVATE TREATY, THE UNEXPIRED

TERM of LEASE of certain extensive and valuable LEAD MINES, situated between the town of Newtownards and Bangor, in the county of Down, Ireland, and called the NEWTOWNARDS MINES; together with the MACHINERY, TOOLS, IMPLEMENTS, STORES, and MATERIALS, thereto belonging; including FIVE STEAM-ENGINES, EXCELLENT CRUSHING MILLS, and every requisite convenience for carrying on an extensive business. These mines have already yielded in profits £85,000 and upwards, and are still working at a profit. It is now requisite to open out new ground, of which there is a large extent unexplored; from the nature of the Deed of Association, the directors are unable to make calls upon the shareholders, and it has been determined to dispose of the mine.

The LEASE, which comprises the whole townland of White Spots, is held for the life of a healthy young man, 19 years of age, together with an unexpired term of six years from the 1st November last. The works are conveniently situated within a few miles from the port of Bangor, where the mining company have a store.

A few spirited adventurers, willing to embark a moderate capital, will find this a most favourable opportunity, offering fair and reasonable prospects of success.

Terms and particulars may be known upon application to W. BECKWITH, Esq., Douglas, Isle of Man; or Mr. H. B. NOBLE, Secretary of the Newtownards Mining Company, Douglas.—April 7, 1858.

FOR SALE, BY PRIVATE CONTRACT, the HOLYFORD

MINES, CAPPAWHITE, TIPPERARY.—These mines are held under leases for an unexpired term of 49 years, at a royalty of 1-15th. The plant and materials comprise PUMPING and DRAWING STEAM-ENGINES AND MACHINERY, railway and dressing-floors, large WATER-WHEEL, with crushing and stamping machinery, and abundant supply of water for all purposes. Agents' houses, labourers' cottages, and all requisites for mining on an extensive scale. The mine has returned large profits, and is still yielding considerable quantities of ore. But an outlay for opening new ground is needed, which the present adventurers are not in a position to supply, the greater portion of the shares being held by parties residing abroad, and representatives of deceased shareholders.—For further particulars, apply to Captain PASCOE, on the mines; or to Mr. C. HUNT, 16, New Broad-street, London, E.C.

COLLIERY.—TO BE LET, on terms to be agreed upon, a valuable

and extensive COAL FIELD, in the best part of the county of STAFFORD, having every facility by canals and railway. It is bounded on three sides by collieries at work. Sunk through two seams of coal. The quality is second rate, but, owing to the vicinity of large towns and easy communication, the profits are as great as from a finer quality. Capital required, near £20,000.—For further particulars, apply to Messrs. BROOKS and BEAL, 209, Piccadilly.

NOTICE TO RAILWAY AND STEAM-BOAT TRAVELLERS,

—ANDERTON'S HOTEL, 162, 164, 165, FLEET STREET. BREAKFAST, with joint, 1s. 6d. BEDS, 10s. 6d. per week. DINNERS from Twelve to eight o'clock; joint and vegetable, 1s. 6d.; with soup or fish, 2s. TURTLE SOUP AND VENISON DAILY. TABLE D'HOTE at Half-past one and Half-past five, at Two Shillings each. A night porter in attendance

FURNACES IN SCOTLAND, IRELAND, ENGLAND, AND ELSEWHERE [LAND or MARINE], MADE to PREVENT SMOKE and ECONOMISE COAL, &c., by the PATENT REGULATING AIR-DOORS, delivered in London at £12 12s. each. ENTIRE COST COVERED BY SAVING OF FUEL IN A FEW MONTHS. The patentee will feel much obliged for information of any infringement of his right, by fraudulent imitation or otherwise.
J. LEE STEVENS, 1, Fish-street-hill, London, E.C.

OVERLAND ROUTE.—WEEKLY COMMUNICATION BY STEAM TO INDIA, &c., VIA EGYPT.
The PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the MEDITERRANEAN, EGYPT, ADEN, CEYLON, MADRAS, CALCUTTA, the STRAITS, CHINA, and MANILLA, by their steamers leaving Southampton on the 4th and 20th of every month; and for the MEDITERRANEAN, EGYPT, ADEN, and BOMBAY, by their packets leaving Southampton about the 11th and 27th of the month.
For further particulars, apply at the company's offices, No. 122, Leadenhall-street; and 18, Oriental-place, Southampton.

GOLD DISCOVERIES.—SHORTEST ROUTE TO VANCOUVER'S ISLAND AND NEW COLUMBIA, VIA PANAMA.
PASSENGERS proceeding to NEW COLUMBIA can be BOOKED to COLON, ISTHMUS OF PANAMA, by the steamers of the ROYAL MAIL STEAM PACKET COMPANY, under contract with Her Majesty's Government, which leave Southampton on the 2d and 17th of each month.
Trains run daily across the Isthmus of Panama, and the vessels of the Pacific Mail Steam Ship Company regularly leave Panama for the North Pacific.
For further information, and for rates of passage and freight, apply to Captain W. VINCENT, superintendent of the company, Southampton; or to the undersigned,
55, Moorgate-street, E.C., London. R. T. REEP, Sec.

STEAM UNDER SIXTY DAYS ECLIPSED.
The MARCO POLO of this line sailed with the steam-ship ROYAL CHARTER from Melbourne, and arrived in Liverpool eight days before her.
PASSAGE MONEY £14 AND UPWARDS.
BLACK BALL LINE BRITISH AND AUSTRALIAN
EX-ROYAL MAIL PACKETS.
Appointed to Sail from LIVERPOOL on the 5th of each Month
FOR MELBOURNE,
Forwarding Passengers by Steam to various Ports in AUSTRALIA AND TASMANIA.

Ship.	Register.	Burthen.	Captain.	Date.
GREYHOUND	1410	4000	DAVIES	5th October.
OCEAN CHIEF	1092	3000	BROWN	5th November.
LIGHTNING	2090	4500	BYRNE	5th December.
MARCO POLO	1625	3500	CLARKE	5th January.
DONALD McKAY	2604	5000	TOBIN	5th February.
BRITISH TRIDENT	1555	3000	O'NEILL	5th March.

The above line is composed of the LARGEST, the FINEST, and FASTEST MERCHANT SHIPS in the WORLD, and have been built by the most celebrated builders of the day, including M'KAY, of Boston. They are commanded by men who have already rendered themselves famous, and their equipments and accommodations are unequalled by any line of ships afloat.
The Black Ball Line has had the distinguished honour of a visit from Her Majesty the Queen, who was most graciously pleased to say that she had no idea there were such magnificent ships in her merchant navy.
Freight and passage, apply to the owners, JAMES BAINES and Co., Liverpool; or to T. M. MACKAY and Co., 2, Moorgate-street, London, E.C.

PASSAGE MONEY £14 AND UPWARDS.
WHITE STAR LINE OF BRITISH AND AUSTRALIAN
EX-ROYAL MAIL PACKETS.
SAILING BETWEEN
LIVERPOOL AND MELBOURNE, on the 20th and 27th of every month, and forwarding Passengers by Steamers at through rates to
ALL PARTS OF AUSTRALIA.
To the consignment of H. T. Wilson and Co., Melbourne.

Ship.	Captain.	Register.	Burthen.	To sail.
MERMAID	J. WHITE	1320	4500	Sept. 20.
TASMANIA	NOURSE	1198	4000	Sept. 27.
SHALIMAR	J. R. BROWN	1432	4500	Oct. 20.
RED JACKET	M. H. O'HALLORAN	2460	5000	—
WHITE STAR	T. C. C. KERR	2360	5000	—

The famous clipper ship *Mermaid*, Capt. James White, late chief officer of the *White Star*, will be dispatched as the packet of the 20th September, with mails, cargo, and passengers. She has made some of the quickest passages on record, and has sailed the extraordinary distance of 3740 geographical miles in 13 successive days. Her outward passages have been made in 72, 75, and 77 days, and from Melbourne to Liverpool in 75 and 77 days. Her saloons are handsome, and elegantly furnished.
The magnificent packet ship *Tasmania* is remarkably fast, and is now on her second voyage in this line. Her saloons are spacious, and handsomely furnished. Bed, bedding, and necessaries for saloon passengers in all the ships.
Passengers embark on the 20th and 27th of September.
For freight or passage, apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool.

AUSTRALIA.—WHITE STAR CLIPPERS.—The famous clipper ship, MERMAID, 1320 tons register, 4500 tons burthen, Capt. JAMES WHITE, late chief officer of the *White Star*. This well-known and splendid clipper will be dispatched as the packet of the 20th Sept., with mails, cargo, and passengers. She has made some of the quickest passages on record, and has sailed the extrordinary distance of 3740 geographical miles in 13 successive days. Her outward passages have been made in 72, 75, and 77 days, and from Melbourne to Liverpool in 75 and 77 days. Her saloons are handsome and elegantly furnished. Bed, bedding, and linen for saloon passengers. Passengers embark on Monday, the 20th September.—For freight or passages apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool.

GOLD GETTING MACHINERY FOR LARGE OR SMALL QUANTITIES.—STAMPS (DRY) for REDUCING ORES or QUARTZ to FINE FLOUR for AMALGAMATION. AMALGAMATORS, RETORTS, PUMPS, and everything for MINING PURPOSES, to be seen at work at J. WALKER'S, 17, Cowper-street, City-road.

HEARDER'S PATENT TELEGRAPH CABLE.—J. N. HEARDER, PLYMOUTH, is READY to TREAT with CAPITALISTS or TELEGRAPH COMPANIES for the ADOPTION of his NEW FORM of CABLE, intended to obviate the effects of induction, the bane of long submarine lines. It can be made of any size, specific gravity, or conducting power, and of a strength to suit any necessary strain. The *Mechanics' Magazine*, September 4, contains his specification in full.

BRICKS.—Messrs. OATES AND INGRAM inform brick makers on an extensive scale that their PATENT SOLID BRICK MACHINE is now THOROUGHLY and EFFICIENTLY TESTED, and are prepared to OFFER the following counties to the trade, in districts, either by ROYALTY or PURCHASE:—Middlesex, Surrey, Sussex, Essex, Kent, Norfolk, Suffolk, Cambridge, Oxford, Gloucester, Hertford, Berks, Bucks, Huntingden, Devon, Cornwall, Dorset, Wilts, Hants, and Isle of Wight.
With this PATENT MACHINE the ordinary surface clay requires no preparation whatever, whilst that of a rocky nature has merely to be passed through rollers in the usual way, AND THENCE, WITHOUT ANY TEMPERING, INTO THE MACHINE, FROM WHICH THE BRICKS ARE REMOVED DIRECT TO THE KILN IN A STATE READY FOR BURNING.
The MACHINE is now making UPWARDS OF THIRTY BRICKS PER MINUTE at the works of Messrs. KIRK and PARRY, Government contractors, Fort Elson, near Gosport; and also at the Patent Solid Brick Works of T. WELLS INGRAM, Oldbury, near Birmingham.
Application for orders to see the machine in operation to be made to Messrs. OATES and INGRAM, Bradford-street, Birmingham Samples of clay may be sent and passed through the machine, and the bricks burnt, or a sample brick will be sent to any party wishing to see one.

PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

MESSRS. McNICOLL AND VERNON'S PATENT STEAM TRAVELLING CRANE.
This machine will be found invaluable at the GOODS DEPOTS of RAILWAYS, in the ERECTION of LARGE BUILDINGS, VIADUCTS, BRIDGES, &c., in IRON FOUNDRIES, STONEMASONS' YARDS, QUARRIES, SAW-MILLS, TIMBER YARDS, or in any place where the hoisting, piling, and conveying of heavy weights is necessary. ONE of them will do MORE WORK with two men than TWO ORDINARY TRAVELLING CRANES with five men each. Any ORDINARY TRAVELLING CRANE can be ALTERED to the PATENT PLAN.
The following are some of the parties who have used the cranes, viz.:—

Executors of the late Messrs. Samuel Ellis & Co., Ironfounders, Manchester	1 crane.
The Hull Dock Company	1 "
Messrs. Joseph Whitworth and Co., Tool Makers, Manchester	1 "
Messrs. Joseph Dowson and Co., Saw-Mill Proprietors, Lambeth	1 "
John Jay, Esq., Contractor, London	1 "
Messrs. Peto, Brassey, and Betts, Contractors, London	6 "
Messrs. John McNicoll and Co., Saw-Mill Proprietors, Liverpool	4 "

Applications for licenses and for estimates to be made to Mr. JOHN VERNON, Engineer and Iron Shipbuilder, Brunswick Dock, Liverpool.

ASSAY OFFICE AND LABORATORIES,
DUNNING'S ALLEY, BISHOPSGATE STEET WITHOUT, LONDON.
Conducted by JOHN MITCHELL, F.C.S., Author of *Manual of Practical Assaying*, Metallurgical Papers, &c.
Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.
For amount of fees, apply to the office, as above.

NEW PATENT ACT, 1852.—Mr. CAMPIN, having advocated Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., is now READY to ADVISE and ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT.
The Circular of Information, gratis, on application to the Patent Office and Designs' Registry, 156, Strand.

PENZANCE AND WEST CORNWALL GAZETTE.
Circulated extensively amongst the mining population of Cornwall and Devon, and in the Scilly Islands.
Established 1839.—Published on Wednesday mornings.
The oldest paper in the district. Politics neutral.—Proprietor, ROBERT JOHN DROWN.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

THE RAILWAY CARRIAGE COMPANY,
OLDBURY, NEAR BIRMINGHAM.
MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.
NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE.
LONDON OFFICES,—34, GREAT GEORGE STREET, WESTMINSTER.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham.

THE PERMANENT WAY COMPANY GRANT LICENSES for the USE of IMPORTANT PATENTED INVESTIONS (now adopted by numerous railways at home and abroad, to the extent of upwards of 10,000 miles), by the following patentees:—

Adams, W. B.	Boucherie, Dr. H.	May, Charles.
Ashcroft, P.	Bridgewater, H.	Monte, C. R.
Barlow, P. W.	Bruff, P. S.	Pole, William.
Barlow, W. H.	Douli, A.	Prince, Paul.
Barningham, W.	Macdonnell, J. J.	Richardson, R.
Bergue, C. de.	Macneill, Sir John.	Samuel, James.
Billups, J. E.	Mansell, R. C.	Wild, C. H.
		Woodhouse, W. H.

Every information as to description, cost, &c., of the various plans may be obtained on application to the secretary. WILLIAM HOWDEN.
26, Great George-street, Westminster.

JOHN ROGERSON AND CO., NEWCASTLE-ON-TYNE, AND MIDDLESBRO'-ON-TEES.
PIG, BAR, PLATE IRON, CHAINS, ANCHORS, FORGINGS, GIRDERS, PIPES, FOUNDRY WORK.
LONGRIDGE'S WEST HARTLEY STEAM COALS (on the Admiralty List).
COKING, GAS, HOUSE, AND SMITHS' COALS, COKE, FIRE-BRICKS, &c.

JOHN H. PECK, MANUFACTURER OF RAILWAY OIL COVERS, CART AND WAGON COVERS, OIL CLOTH, STACK COVERS, BOAT SHEETS, TARPAULIN, BRATTICE CLOTH, COKE AND CORN SACKS, POTATO BAGS, TWINE, &c., WIGAN.
LONDON AGENT.—T. E. WELLER, 15, Duke-street, Adelphi.

RICHARDSON AND CO., ENGINEERS AND IRONFOUNDERS, TUNNEL FOUNDRY AND SPRING GARDEN IRONWORKS, DUDLEY, NEAR BIRMINGHAM.
MANUFACTURERS OF GAS AND WATER APPARATUS, STEAM-ENGINE BOILERS, SINGLE AND DOUBLE GAS HOLDERS, TANKS, BRIDGES, BOATS, ROOFS, VALVES, &c.
GAS WORKS ERECTED FOR MINES, PUBLIC BUILDINGS, TOWNS, &c.

MORRIES STIRLING'S PATENT CAST AND MALLEABLE IRON.—The TOUGHENED CAST-IRON, for GIRDERS, SHAFTINGS, ROLLS, PINIONS, RAILWAY WAGON WHEELS, ENGINE CYLINDERS, HYDRAULIC CYLINDERS, and for all purposes where a strong, dense iron is required, CAN BE PROCURED of the following brands:—

DUNDYVAN.	HORSLEY COMPANY.
FORTH COMPANY.	LLOYDS, FOSTER, AND CO.
RUSSELL'S HALL, &c.	

RAILS OF (OR SURFACED WITH) PATENT HARDENED IRON, CAN BE ORDERED direct from the following WORKS:—

PARKGATE.	LOSH, WILSON, AND BELL.
LLOYDS, FOSTER, AND CO.	EBBW VALE.
CWM CELYN AND BLAINA.	TREDEGAR.
HAWKS, CRAWSHAY, AND CO.	DUNDYVAN.
MONKLAND.	

For durability, these rails have never been surpassed. They wear out several sets of ordinary rails, and do not laminate.
Full information, and terms for use of patent right, can be obtained of Messrs. CONNELL and HOPE, 3, Princes-street, Westminster; and of Mr. S. THORNTON, Bradford-street, Birmingham. Mr. THORNTON also receives orders for Mr. MORRIES STIRLING'S Patent Iron and Rails.

CALVERT'S PATENT PROCESS FOR MAKING COKE AND IRON FREE FROM SULPHUR.
For LICENSES to USE the above process, apply to ROBERT LONGDON, Jun., 63, King-street, Manchester.
For APPLICATION of the PATENT to GAS WORKS, apply to Mr. GEORGE TRICKETT, Exchange Chambers, Manchester.

LEAD MINES.—LEAD ORES are PURCHASED by the BRITISH AND FOREIGN SMELTING COMPANY (LIMITED) in small or large parcels, and for which liberal prices will be given. Samples direct from the mines are preferred, and may be addressed to the company's works, at Old Ford Wharf, Bow, near London; or to the offices, No. 26, Throgmorton-street, London.
N.B.—LEAD ASHES and every description of OLD LEAD PURCHASED.

LEAD FOR EXPORTATION.—PIG-LEAD (hard and soft) SOLD at LOW RATES. The BEST PRICE given for LEAD ASHES, &c., and OLD LEAD.—ROUPELL and Co., Southwark Lead Works, Gravel-lane, London.

MESSRS. R. & J. COUPE, ENGINEERS and IRONFOUNDERS, MANUFACTURERS of HORIZONTAL HIGH-PRESSURE STEAM-ENGINES, from 10 to 200-horse power; the larger description of engines mounted with their IMPROVED EQUILIBRIUM SLIDE PISTON VALVE, which has proved itself so eminently adapted for winding and other engines.
Clayton Foundry, Wigan.

CONDIE'S PATENT STEAM HAMMERS.—FIRST-CLASS STEAM HAMMERS, from 10 cwts. to 7 tons, suitable for jobbing forges, puddling forges, and the smith's shop of engineers, ship-builders, wagon builders, agricultural implement makers, railway and steam navigation companies, &c.—Govan Bar Ironworks, Glasgow. JOHN CONDIE.

STEAM PUMPS, FOR LAND AND MARINE PURPOSES.
SINGLE or DOUBLE ACTING; sizes from 2½ to 12 in. diameter, and from 4 to 18 in. stroke; by JOHN CAMERON. Used for feeding boilers, raising water (for reservoirs, tanks, irrigation, &c.), turning power, or as a steam fire engine.
Works, Egerton-street, Hulme, Manchester.

ISLE OF MAN.—BEST CONVENIENCE for TIPPING, only fifteen yards from the sea. Any quantity of metal, and proved to be the best in the world. Vessels could be loaded at the quarry. It comprises about three miles in length, and one in breadth. Good cart road to the slate quarry, and only the one quarry in the island.—JOSEPH and ROBERT ROBERTS, Peel, Isle of Man.

INCRUSTATIONS IN STEAM BOILERS are EFFECTUALLY REMOVED and PREVENTED by USING EDWD. MUFF'S COMPOSITION.—Testimonials, with directions for use, may be had at Tyersall Hall, near Bradford, by post or otherwise, where orders and communications will receive prompt attention.

RAILWAY BREAKS.—CHAMBERS AND CHAMPION'S PATENTS.—This simple and effective break apparatus, constituting an important step towards the safe and economical working of railways, may be seen in use on the North London Railway, where it has been in continual and successful operation during the past six months, on the trains running between Fenchurch-street and Camden Town. By simple and inexpensive means, applicable to all carriages at present in use, it enables any number of breaks attached to different carriages of a train to be simultaneously worked, stopping it in far less space, and with greater ease and certainty, than is possible under the ordinary single break system.—Letters on the subject, addressed to Messrs. CHAMBERS and CHAMPION, Tynsted House, Tynsted, near Sittingbourne, Kent, will be promptly attended to, and further information will be furnished.

VENTILATION OF MINES.—The ATTENTION of PROPRIETORS of MINES is CALLED to LEMIELLE'S PATENT VENTILATOR, capable of exhausting 15,000 to 120,000 cubic feet of air per minute, at a trifling cost.—Apply for particulars to Mr. T. LAURENT, 19, Eldon-square, Newcastle; Messrs. MORTON and Co., Leeds; or Mr. TESTULAT, 4, Stow-hill.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

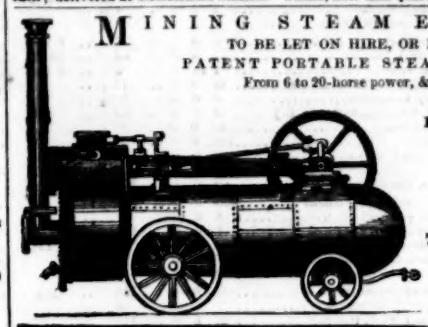
IMPORTANT TO THE MINING PUBLIC.
THE PATENT VALVE COMPANY, having effectually tested the working of their recently patented clack valve, and having made arrangements for supplying them, are PREPARED to RECEIVE ORDERS from the adventurers and managers of mines, and others, who may be desirous of adopting them. In introducing their valve to the notice of the mining public and others, the patentees have no hesitation in stating that the SAVING in the articles of leather and copper, and in the labour required for changing the clack valve now in general use, will, under ordinary circumstance, EQUAL NINETY-FIVE PER CENT., whilst they feel equally certain that in many cases the saving will even exceed that amount.
Full information, and terms for use of the patent right, can be obtained of Capt. JOHN DAVEY, manager of the United Mines, Gwennap, under whose inspection the valve has been for some time at work; of Capt. J. MAYNE, on the same mines; or by letter addressed to the Patent Valve Company, St. Day, Truro, Cornwall.
Dated August 25, 1858.

THE ONLY GAUGE GLASSES THAT WILL STAND A PRESSURE FROM 100 lbs. TO 500 lbs.
Edinburgh, Perth, and Dundee, and Scottish Central Railways, Locomotive Department.—Perth, Dec. 20, 1856.
We have now used the Glass Tubes for Water Gauges, made by Mr. Tomey, for three years, and can recommend them to railway engineers. I have not seen any equal to them. ALEX. ALLAN, M. Inst. C.E., Locomotive Superintendent.
Are used on the London and North-Western, Eastern Counties, Midland, and all the principal railway lines in Great Britain. ENOCH TOMEY, Canal-street, Perth.

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD, MANUFACTURERS OF PATENT TUBULAR TUYERES.

HOT-BLAST FURNACE TUYERES, with sockets, 36s. each, without sockets, 35s. each; delivered at Chesterfield Station. Terms, nett cash quarterly.

MINING STEAM ENGINES,
TO BE LET ON HIRE, OR FOR SALE,
PATENT PORTABLE STEAM-ENGINES,
From 6 to 20-horse power, & upwards,
SUITABLE FOR
PUMPING, WINDING, AND WORKING MACHINERY GENERALLY.
Apply to T. CRESSWELL, Engineer, No. 92, Blackfriars-road, WHERE THEY MAY BE SEEN.



HALEY'S PATENT LIFTING JACK,
MANUFACTURED BY THE INVENTOR,
JOSEPH HALEY,
ALBION STREET, GAYTHORN, MANCHESTER.
SCREW JACKS, SHIP JACKS.
SLIDE AND CENTRE LATHES, PLANING, SHAPING, BORING, DRILLING, SCREWING, WHEEL CUTTING, AND OTHER MACHINES.
RIVET MAKING MACHINES.

GUTTA PERCHA BANDS, TUBING, &c.—Our BANDS, carefully MANUFACTURED from the VERY BEST GUTTA PERCHA only, are considerably CHEAPER, and, when fairly worked, are far more DURABLE than LEATHER. Can be had in lengths of 100 or 120 feet without a joint, are easily joined or repaired, and are, when worn out, re-purchased by us at about one-third of their original cost. In the event of a break down, a band of any size can be supplied within a few hours of receipt of order. The present prices are as under:—
Bands ⅛ in. thick and upwards to ½ in. .. 2s. 0d. per lb.
Bands above ½ in. thick..... 2s. 2d. per lb.
Subject to a liberal discount for cash, varying according to quantity. TUBING and other articles equally low. All our patented manufactures are to be obtained wholesale from our own works; retail from any of our dealers.
THE WEST HAM GUTTA PERCHA COMPANY.
West-street, Smithfield, London, E.C.

MAPPIN'S DRESSING CASES AND TRAVELLING BAGS.—MAPPIN BROTHERS (Manufacturers by Special Appointment to the Queen) are the only Sheffield makers who supply the consumer in London. Their London Show Rooms, 67 and 68, KING WILLIAM STREET, LONDON BRIDGE, contain by far the LARGEST STOCK OF DRESSING CASES, and LADIES' and GENTLEMEN'S TRAVELLING BAGS, in the world, each article being manufactured under their own superintendence.
MAPPIN'S GUINEA DRESSING CASE, for gentlemen.
MAPPIN'S TWO GUINEA DRESSING CASE, in solid leather.
LADIES' TRAVELLING and DRESSING BAGS, from £2 12s. to £100 each.
GENTLEMEN'S ditto ditto, from £3 12s. to £80.
Messrs. MAPPIN invite inspection of their extensive stock, which is complete with every variety of style and price.
A costly Book of Engravings, with prices attached, forwarded by post on receipt of 12 stamps. MAPPIN BROTHERS, 67 and 68, King William-street, City, London; Manufactory, Queen's Cutlery Works, Sheffield.

DEAFNESS, NOISES IN THE HEAD.—INSTANT RESTORATION OF HEARING GUARANTEED and EXPERIENCED by one consultation, without operation or instruments. Dr. WATTERS, the Consulting Resident Surgeon to the Dispensary for Diseases of the Ear and Eye, 32, Spring-gardens, Charing-cross, London, pledges himself to CURE DEAFNESS of 40 or 50 years by a painless treatment, unknown in this country. The dispensary monthly reports show the daily cures, without failure. A book has been published for deaf persons in the country to cure themselves, sent on receipt of letter, enclosing five postage stamps.
Hours of consultation, Eleven till Four every day.

AN ACT OF GRATITUDE.
Five Thousand Copies of a Medical Book for Gratuitous Circulation.
GEORGE THOMAS, Esq., having been EFFECTUALLY CURED of a NERVOUS DEBILITY, LOSS OF MEMORY, and DIMNESS OF SIGHT, resulting from the early errors of youth, by following the instructions given in a medical work by a physician, he considers it his duty, in gratitude to the author, and for the benefit of nervous sufferers, to publish the means used. He will, therefore, send free, to any address, in a sealed envelope, on receipt of a directed envelope enclosing two stamps, to pre-pay postage, a copy of the medical work, containing every information required.—Address, G. THOMAS, Esq., Craven House, Newcastle-upon-Tyne.

AN ACT OF SINCERE GRATITUDE.
Five Thousand Copies of a Medical Work to be given away.
A CLERGYMAN OF THE CHURCH OF ENGLAND, having been cured of severe Nervousness, Pains in the Head, Loss of Memory, Indigestion, Debility, Prostration, and other fearful symptoms, not the least of which was the great mental anguish resulting from the terrors occasioned by the frauds of wicked pretenders, adopts this unusual mode of testifying his deep gratitude, by publishing, for the benefit of others, the means employed for his own marvellous restoration to health and happiness, to which he had long been a stranger. He will, therefore, send a copy of the remarkable book, containing all the necessary information, on receipt of two penny stamps to pre-pay postage.—Address, Rev. H. R. TRAVERS, M.A., 1, North Cumberland-place, Bayswater, Middlesex.
CAUTION.—The advertiser regrets to find that of late several disreputable quacks have dishonestly adopted this plan of puffing off their deceptive books.

VALUABLE MEDICAL BOOK GRATIS.—To those who have been drawn into the vortex of a pernicious secret habit, suicidal in its nature, as it drains the constitution of its nervous fluid, that vital principle which governs and regulates every function of our bodies, and to all who suffer from any secret affliction, pointing out the way to purity and health, a valuable medical book of 100 pages, 10,000 copies of which are being issued gratuitously by the Anatomical and Pathological Society of Great Britain, as a faithful monitor, showing the danger of those secret practices which are known to extensively prevail (especially at schools and colleges), and as a friendly guide to such as suffer from any secret disease, debility, or incapacity.
Most valuable to those who feel an interest in the subjects treated of, showing sufferers the means of recovering perfect health.—*Medical Journal.*
The work may be obtained, free of charge, by letter only, by enclosing a plain address and two stamps (to pre-pay postage), to Dr. W. B. MARSTON, anatomical museum, 47, Berner's-street, Oxford-street, London.

THE GREAT EUROPEAN REMEDY FOR NERVOUSNESS, RELAXATION, AND EXHAUSTION.—Protected by Royal Letters Patent, and sanctioned by all the great Continental Colleges of Medicine.
DR. DE ROOS' CELEBRATED GUTTÆ VITÆ, OR LIFE DROPS, are the great European remedy for Spermatorrhœa, Exhaustion, Nervousness, Debility, Incapacity for Society, Study, or Business, Shaking of the Hands and Limbs, Indigestion, Flatulency, Shortness of Breath, Consumptive Habits, Dimness of Sight, Dizziness, Pains in the Head, Eruptions, Blotches, Pimples, Sore Throat, Pains in the Bones and Joints, Scurvy, Scrofula, and all those diseases for which mercury, sarsaparilla, &c., are not only employed in vain, but too often to the utter destruction of the sufferer's health. Their almost marvellous powers must be felt to be believed. Hundreds of apparently hopeless cases, which had been given up by the faculty, have been speedily cured, and many thousands have derived almost miraculous relief, when everything else had signally failed.
Price 11s., and four times the quantity 33s. per bottle, obtainable through all medicine vendors; of whom also may be had the *Medical Adviser*, 2s. 6d. in sealed envelope; or it may be sent direct from the author for 42 penny stamps.
Advice and medicines sent to any address secure from observation, on receipt of a full detail of the case and the usual fee of £1. Post-office orders payable at the Holborn Office to Walter De Roos, M.D., 10, Berner-street, Oxford-street, London. Hours for personal consultation daily from Eleven till Four, Sundays excepted.
N.B. Should difficulty arise in procuring the above, enclose the amount per Post-office order, or otherwise, to 10, Berner's-street, and they will be sent securely packed per return.

HOLLOWAY'S PILLS UNEQUALLED FOR THE CURE OF DROPSY.—The singular efficacy of Holloway's pills in the numerous cures effected by their use in some of the most obstinate cases of dropsy are very extraordinary, they act with such certain and peculiar effect upon the system that the fluids arising from this direful disease are imperceptibly carried off and entirely prevented from any further accumulation; the distressing symptoms which accompany this complaint being thus dispersed, the sufferer regains buoyancy of spirits, and a completely renovated constitution. Females at particular periods of life should have recourse to these pills, as they are the finest medicine known.—Sold by all medicine vendors throughout the world, and at Prof. Holloway's establishment, 244, Strand, London.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consols (cop.), Philiack* [S.E.]	£2 11 10	£ 8¾ .. 10 10½	..	£19 3 0	£0 4 0—Aug. 16, 1858.
1624	Balleswidden (tin), St. Just	11 5 0	5 ..	..	12 5 0	0 5 0—Jan. 1, 1854.
10000	Bampfylde (copper), Devon	0 12 6	1½ ..	..	0 0 7½	0 0 7½May 12, 1858.
4000	Bedford United (copper), Tavistock†	2 6 8	6¼ .. 6	..	10 3 0	0 4 0—June 18, 1858.
240	Boscean (tin), St. Just	20 10 0	65 ..	..	21 0 0	3 0 0—Sept. 4, 1857.
200	Botallack (tin, copper), St. Just*	91 5 0	170 ..	..	425 15 0	2 10 0—Aug. 17, 1858.
1200	Brightside and Fraggatt Grove, Derbyshire	3 0 0	3½ ..	..	3 0 0	3 0 0—April 30, 1858.
100	Brynford Hall (lead), Flintshire	25 0 0	50 ..	..	13 0 0	5 0 0—July 31, 1858.
1000	Bryntail, Llanidloes, Montgomeryshire	7 15 0	1½ .. 1⅜ 1⅝	..	0 5 0	0 5 0—July 1, 1858.
390	Budnick Consols (tin), Perran	2 2 6	4⅛ ..	..	0 10 0	0 10 0—March 26, 1857.
6000	Bwich (silver-lead), Cardiganshire	3 5 6	1¼ ..	..	0 2 6	0 2 6—July 30, 1856.
4096	Calstock Consols (copper)	5 0 0	5 .. 5 5⅛	..	0 2 6	0 2 6—Dec. 23, 1857.
1000	Caru Brea (copper, tin), Illogan	15 0 0	54 .. 52 55	..	243 10 0	2 0 0—Aug. 5, 1858.
2048	Carnyorth (tin), St. Just	4 10 0	5 .. 4 4½	..	0 15 0	0 3 0—June 16, 1856.
200	Cefn Cwm Brwyno (lead), Cardiganshire	33 0 0	43 ..	..	5 0 0	2 0 0—March 25, 1858.
2000	Collacombe (copper), Lamerton	2 2 6	12½ ..	..	2 5 0	0 8 0—Dec. 2, 1857.
256	Condurrow (copper, tin), Camborne [S.E.]	20 0 0	60 .. 40	..	85 0 0	2 0 0—June 10, 1857.
12000	Copper Miners of England	25 0 0	27 ..	..	7½ per cent.	— Half-yearly.
300000	Ditto ditto (stock)	100 0 0	30 ..	..	1 per cent.	— Half-yearly.
1055	Craddock Moor (copper), St. Cleer	8 0 0	34 .. 34	..	1 14 0	0 5 0—July 9, 1858.
30000	Craven Moor, Limited (lead), Yorkshire	0 10 0	⅜ ..	..	0 0 9	0 0 9—Feb. 28, 1856.
128	Cwmystwith (lead), Cardiganshire*	60 0 0	250 ..	..	140 0 0	15 0 0—Aug. 19, 1858.
280	Derwent Mines (silver-lead), Durham	300 0 0	150 ..	..	122 0 0	10 0 0—June 25, 1857.
4076	Devon and Cornwall (copper)	4 6 3	9 ..	..	0 7 6	0 2 6—April 20, 1858.
1024	Devon Great Consols (cop.), Tavistock* [S.E.]	1 0 0	465 .. 455 465	..	625 0 0	8 0 0—July 23, 1858.
672	Ding Dong (tin), Gulval†	35 5 0	12¼ .. 11 12¼	..	16 7 6	1 10 0—March 2, 1857.
179	Dolcoath (copper, tin), Camborne*	257 15 0	270 ..	..	967 0 0	7 0 0—Aug. 9, 1858.
12800	Drake Walls (tin, copper), Calstock	2 0 0	1⅛ ..	..	0 13 6	0 2 0—Sept. 11, 1857.
300	East Daren (lead), Cardiganshire*	32 0 0	115 .. 110	..	48 0 0	3 0 0—Aug. 12, 1858.
2048	East Falmouth (copper), Gwennap	2 0 0	3 ..	..	0 7 6	0 2 6—Jan. 25, 1858.
128	East Pool (tin, copper), Pool, Illogan*	24 5 0	175 ..	..	305 0 0	2 10 0—Aug. 30, 1858.
1024	East Wheal Margaret (tin, copper)	7 17 6	2 ..	..	0 5 0	0 5 0—Jan. 11, 1854.
5700	Exmouth (silver-lead), Christow	4 14 0	8 ..	..	3 15 0	0 2 6—April 27, 1858.
1400	Eyam Mining Company (lead), Derbyshire	5 0 0	38 ..	..	18 13 4	1 0 0—Aug. 26, 1858.
4940	Fowey Consols (copper), Tywardreath	4 0 0	3½ ..	..	41 4 3	0 6 0—Feb. 17, 1857.
4448	General Mining Co. for Ireland (cop., lead)	4 0 0	1¾ ..	..	1 0 8	0 3 3—June 5, 1853.
2000	Goginan (silver-lead), Cardiganshire	12 5 0	2½ ..	..	22 0 0	0 5 0—Sept. 5, 1850.
1024	Gonamena (copper), St. Cleer	13 15 0	12 ..	..	0 7 6	0 7 6—Dec. 21, 1852.
243	Grambler and St. Aubyn (copper)	109 10 0	145 .. 133 138x.d.	..	14 0 0	2 0 0—Sept. 7, 1858.
6000	Great South Tolgus [S.E.] Redruth	0 14 6	15½ .. 15 15½	..	2 12 6	0 6 0—Aug. 19, 1858.
26666	Great Wheal Vor (tin, cop.), Helston [S.E.]	8 7 6	3¼ .. 2¾ 3	..	0 5 0	0 5 0—Oct. 22, 1855.
119	Great Work (tin), Germoe	100 0 0	110 ..	..	221 10 0	7 10 0—Feb. 27, 1857.
1024	Herodsfoot (lead), near Liskeard	8 10 0	7¼ .. 6¾ 7	..	4 7 6	0 12 6—June 11, 1858.
6000	Hingston Down Consols (copper), Calstock	3 12 6	3½ .. 3¼ 3½	..	2 16 0	0 2 6—Nov. 25, 1856.
2000	Holyford (copper), near Tipperary	11 0 0	8¾ ..	..	4 2 6	0 5 0—Jan. 28, 1857.
2560	Isle of Man, Limited (lead)†	25 0 0	42 ..	..	58 8 3	1 0 0—June 22, 1858.
76	Jamaica (lead), Mold, Flintshire	3 13 6	— ..	..	380 0 0	5 0 0—March 10, 1851.
20	Laxey Mining Company, Isle of Man	100 0 0	1000 ..	..	1420 0 0	50 0 0—June 30, 1857.
160	Levant (copper, tin), St. Just	2 10 0	120 ..	..	1071 0 0	5 0 0—Aug. 17, 1858.
5000	Lewis Mines (tin, copper), St. Erth	6 1 11	2 ..	..	0 10 0	0 10 0—Dec. 20, 1855.
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	120 .. 100	..	315 10 0	2 0 0—Aug. 5, 1858.
6000	Marke Valley (copper), Caradon	4 10 6	2¼ .. 2¼	..	0 5 6	0 3 0—Sept. 7, 1855.
5000	Mendip Hills (lead), Somerset	3 15 0	1⅜ ..	..	1 13 6	0 6 0—May 31, 1858.
5000	Merllyn (lead), Flint	3 2 6	⅛ .. ⅜	..	1 11 0	0 2 6—June 22, 1853.
1800	Minera Mines, Limited (lead), Wrexham	25 0 0	125 .. 100	..	30 2 6	3 0 0—May 8, 1858.
29000	Mining Company of Ireland (cop., lead, coal)	7 0 0	14½ .. 14½	..	13 13 4	0 5 7—July 1, 1858.
5000	Nanteos and Penrhiw, Limited (£2½ shares)	1 17 6	1 ..	..	0 1 6	0 1 6—April 30, 1855.
6400	Nether Hearth, Westmoreland	0 7 0	1⅛ ..	..	0 2 0	0 1 0—May 21, 1856.
470	Newtonards Mining Company, Co. Down†	50 0 0	35 ..	..	55 0 0	1 0 0—July , 1858.
200	North Pool (copper, tin), Pool	40 18 0	10 ..	..	324 0 0	2 0 0—Dec. 26, 1854.
700	North Roskear (copper), Camborne	12 0 0	21 ..	..	750 0 0	4 0 0—Sept. 26, 1853.
6000	North Wheal Basset (cop., tin), Illogan* [S.E.]	nil.	10½ ..	..	14 12 0	0 5 0—Aug. 25, 1858.
6400	Par Consols (copper), St. Blazey [S.E.]	1 2 6	17 .. 16⅞ 17⅛	..	32 5 0	0 11 0—July 6, 1858.
500	Peak United (lead), North Derbyshire	7 15 0	2½ ..	..	4 10 0	0 10 0—April 12, 1856.
200	Phœnix (copper, tin), Linkinghorne	100 0 0	330 .. 350	..	269 10 0	25 0 0—May 5, 1858.
1000	Polberro (tin), St. Agnes (Preferential)	15 0 0	5 ..	..	18 11 9	1 0 3—July 11, 1857.
1772	ditto ditto (Old and ditto)	—	5 ..	..	1 0 0	0 10 0—March 2, 1858.
560	Providence Mines (tin), Uny Lelant†	20 13 2	62½ .. 57⅛ 60x.d.	..	76 4 6	2 0 0—Aug. 25, 1858.
2500	Rhoswydol and Bacheiddon (lead)	11 5 0	12 ..	..	0 16 0	0 3 0—July 21, 1858.
512	Rosewarne United (copper, tin), Gwinear*	12 0 0	32½ .. 34⅛	..	32 10 0	1 10 0—June 8, 1857.
15000	Ruardean Colliery Company, Limited	0 5 0	⅛ ..	..	0 0 10½	0 0 6—Feb. 4, 1858.
1200	Sortridge Consols (cop.), Whitchurch [S.E.]	0 6 0	1⅛ .. 1⅛	..	8 10 0	0 2 6—July 27, 1857.
256	South Caradon (copper), St. Cleer* [S.E.]	2 10 0	405 .. 403 405½	..	530 0 0	10 0 0—July 27, 1858.
128	South Crinnis (copper), St. Austell	19 0 0	285 ..	..	60 0 0	20 0 0—June 18, 1855.
512	South Tolgus (copper), Redruth, Cornwall	8 0 0	75 .. 72⅛ 77½	..	76 0 0	1 0 0—Aug. 5, 1858.
496	South Wheal Frances, Illogan* [S.E.]	18 18 9	215 .. 200 205	..	305 5 0	4 0 0—Aug. 6, 1858.
1024	Spearne Consols (tin), St. Just, Cornwall	3 12 0	2¼ ..	..	8 8 6	0 2 6—Dec. 10, 1853.
280	Spearne Moor (copper), St. Just†	23 7 8	15 ..	..	4 5 0	0 10 0—June 13, 1856.
970	St. Aubyn and Grylls (cop., tin), Breage	6 8 4	2½ ..	..	0 17 6	0 7 6—April 1, 1857.
20000	St. Day United (tin and copper)	2 0 0	⅝ .. ⅝	..	0 3 6	0 1 0—Feb. 25, 1858.
476	St. Ives Consols (tin), St. Ives	16 0 0	30 ..	..	917 10 0	1 10 0—Aug. 17, 1858.
9600	Tamar Consols (silver-lead), Beeralston [S.E.]	4 10 0	⅝ .. ⅝ ¾	..	4 13 6	0 2 6—Feb. 7, 1856.
6000	Tincroft (copper, tin), Pool, Illogan [S.E.]	9 0 0	4 .. ¾	..	8 18 6	0 5 0—Sept. 2, 1858.
572	Treivon Consols (tin), St. Ives	11 10 0	9¼ ..	..	1 15 0	0 1 0—Feb. 21, 1854.
120	Trethellan (copper), Gwennap, Cornwall	15 10 0	15 ..	..	403 13 6	2 10 0—April 29, 1851.
4096	Trewentha (silver-lead), Menheniot, Cornwall	2 14 0	1⅛ .. ⅞ 1	..	1 12 0	0 3 0—April 2, 1857.
100	Trumpet Consols (tin), near Helston	95 0 0	11 ..	..	55 0 0	5 0 0—Dec. 20, 1854.
400	United Mines (copper), Gwennap [S.E.]	40 0 0	85 ..	..	61 5 0	2 0 0—Feb. 12, 1846.
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 12 6	⅝ .. ⅜ 1	..	0 5 9	0 1 0—July 8, 1858.
512	Wendron Consols (tin)	23 7 8	35 ..	..	2 0 0	1 0 0—Sept. 22, 1857.
6000	West Basset (copper), Illogan* [S.E.]	1 10 0	22 .. 20 22	..	14 1 0	0 14 0—July 28, 1858.
256	West Caradon (copper), Liskeard [S.E.]	20 0 0	95 .. 95	..	287 5 0	2 0 0—May 28, 1858.
512	West Damsel (copper), Gwennap	12 17 0	115 ..	..	22 0 0	2 0 0—July 20, 1857.
6400	West Fowey Consols (tin and copper)	7 0 0	8¼ ..	..	0 2 6	0 2 6—March 5, 1858.
1024	West Providence (tin), St. Erth†	2 11 7	1¼ ..	..	33 1 9	0 10 0—April 8, 1857.
400	West Wheal Seton (copper), Camborne*	38 10 0	270 ..	..	132 0 0	7 10 0—Aug. 17, 1858.
6140	Wheal Arthur (copper), Calstock	2 1 0	⅜ .. ⅛ ⅜	..	6 10 0	0 10 0—Oct. 23, 1845.
240	Wheal Bal (tin), St. Just	15 0 0	18 ..	..	2 10 0	0 10 0—May 11, 1858.
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	200 .. 195 200	..	495 10 0	6 0 0—Aug. 5, 1858.
256	Wheal Buller (copper), Redruth* [S.E.]	5 0 0	190 ..	..	885 0 0	7 10 0—July 20, 1858.
1024	Wheal Charlotte, Perranuthnoe	5 3 4	7 ..	..	1 10 0	0 10 0—Sept. 9, 1855.
250	Wheal Clifford (copper), Gwennap	—	200 ..	..	42 0 0	3 0 0—Oct. 24, 1857.
4096	Wheal Edward (copper), Calstock [S.E.]	5 10 0	4 .. 3½ 3⅝	..	6 5 0	0 5 0—March 30, 1858.
5000	Wheal Fortescue (copper), Bodmin	nil.	1 ..	..	0 2 4	0 1 6—Jan. 11, 1856.
128	Wheal Friendship (copper), Devon	50 0 0	80 .. 90	..	2385 10 0	10 0 0—Feb. 11, 1858.
1024	Wheal Grylls (copper, tin), Breage	0 4 0	⅛ ..	..	0 2 0	0 2 0—Feb. 24, 1857.
512	Wheal Jane (silver-lead), Kea	3 10 0	20 ..	..	8 10 0	1 10 0—Oct. 15, 1857.
5000	Wheal Kitty (tin), St. Agnes	4 10 0	4 ..	..	0 6 0	0 3 0—March 28, 1857.
1024	Wheal Kitty (tin), Uny Lelant† [S.E.]	1 7 2	8½ .. 8¼ 8½	..	6 0 0	1 0 0—Sept. 17, 1857.
430	Wheal Lovel (tin), Wendron	33 0 0	5 ..	..	31 0 0	1 0 0—Sept. 5, 1856.
448	Wheal Margaret (tin), Uny Lelant	19 15 0	61 .. 58	..	87 10 0	2 10 0—May 28, 1858.
1024	Wheal Mary Ann (lead), Menheniot† [S.E.]	8 0 0	45½ .. 43⅛ 44⅛	..	35 17 6	2 5 0—June 3, 1858.
80	Wheal Owles, St. Just, Cornwall	70 0 0	300 ..	..	225 13 0	5 0 0—Aug. 23, 1858.
240	Wheal Reeth (tin), Uny Lelant	39 10 0	27½ ..	..	40 10 0	3 0 0—Aug. 23, 1852.
198	Wheal Seton (tin, copper), Camborne*	107 0 0	135 ..	..	286 10 0	2 0 0—Oct. 12, 1857.
1040	Wheal Trelawny (silver-lead), Liskeard [S.E.]	4 10 0	24½ .. 24½ 25½	..	33 10 0	1 0 0—July 26, 1858.
1024	Wheal Tremayne (tin, copper), Gwinear	11 2 6	1⅜ ..	..	10 2 6	0 7 6—Jan. 11, 1854.
4096	Wheal Wrey (lead), St. Ives†	1 9 0	3 .. 2½ 2⅝	..	2 12 6	0 2 6—Dec. 22, 1857.
5000	Wicklow (copper), Wicklow	5 0 0	32 .. 32	..	30 5 6	1 10 0—July 15, 1858.

[* Dividends paid every two months. † Dividends paid every three months.]

FOREIGN MINES.

10000	Alten and Quænangen United (cop.), Norway	16 10 0	1 ..	..	£4 5 0	£0 15 0—Nov. 21, 1853.
2464	Burra Burra (cop.), South Australia	5 0 0	135 xd..	..	195 0 0	5 0 0—March 3, 1858.
12000	Cobre Copper Company (cop.), Cuba [S.E.]	40 0 0	41 .. 37 40	..	86 12 0	1 0 0—Jan. 28, 1858.
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	12⅛ .. 11⅛ 12⅛	..	5 18 0	0 10 0—March 19, 1858.
7000	English and Australian	5 0 0	1⅜ ..	..	0 10 0	0 2 6—Sept. 8, 1855.
30000	General Mining Assoc., Nova Scotia [S.E.]	15 0 0	20 .. 19 20	..	11 2 6	0 17 6—June 22, 1858.
15000	Linares (lead), Pozo Ancho, Spain [S.E.]	3 0 0	9¾ .. 9⅜	..	5 10 6	0 8 4—March 30, 1858.
10000	Lusitanian (of Portugal) [S.E.]	1 15 0	1½ ..	..	0 8 9	0 2 6—June 10, 1858.
103815	Mariquita and New Granada [S.E.]	1 0 0	⅞ .. ⅝	..	0 6 6	0 1 6—July 29, 1858.
10000	Pontgibaud (silver-lead), France [S.E.]	20 0 0	7 .. 4 6	..	1 0 0	1 0 0—June 25, 1855.
7000	Royal Santiago (copper), Cuba [S.E.]	16 15 0	⅜ .. ¼	..	33 0 0	1 5 0—July 12, 1848.
11000	St. John del Rey (Limited), Brazil	15 0 0	12 .. 11 12	..	35 7 6	1 0 0—June 19, 1857.
43174	United Mexican (silver), Mexico [S.E.] Av.	28 5 0	3½ .. 3	..	1 16 6	0 4 0—Feb. 14, 1853.
188676	North British Australasian [S.E.]	1 0 0	⅝ ..	..	0 3 11	0 1 3—Feb. 25, 1857.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.
2000	Acadian Charcoal Iron [L.]	7 0 0	6 ..	..
20000	Australian (copper) [S. E.]	7 5 0	⅝ ..	½ ½
75000	Bon Accord (copper) [L.]	0 10 0	½ ..	⅝ ⅝
10000	Brazilian Land & Mining [L.]	5 0 0	1¼ ..	..
6000	Central American (silver) [L.]	5 0 0	— ..	.. 1¾ 2¼
25000	Central Italian (copper) [L.]	2 0 0	— ..	..
50000	Clarendon Cons. (cop.) [S. E.]	0 12 6	.. 4s. 6d.	..
43040	Cologne Mining Co. (lead)	1 4 0	¼ ..	..
10000	Copiapo Smelting [L.]	10 0 0	15 ..	..
75000	Dun Mountain (copper) [L.]	1 0 0	⅜ ..	⅜
15000	East Indian Coal [L.]	10 0 0	10 ..	..
20000	Ellerslie & Bardowie, Jamaica	0 14 0	1¼ ..	..
2000	English Ridge, Newfnd. [L.]	0 10 0	5 ..	..
25000	Fortuna (lead)	2 0 0	2⅛ ..	2⅛
10000	Gt. Barrier Land, Mining, &c.	1 10 0	1½ ..	..
2309	Kinzigthal Min. Ass., Germ.	4 0 0	1 ..	..
25000	Levant Mineral [L.]	10 0 0	1 ..	..
40000	London and Virginia (gold)	1 0 0	1 ..	..
80000	Mount Carbon (coal), Virginia	1 0 0	⅜ ..	..
1000	Mount Gabriel Mineral [L.]	10 0 0	— ..	..
60000	New Granada (gold) [S. E.]	1 0 0	⅜ ..	⅛ ⅜
10000	New Grand Duchy of Baden	0 12 6	2½ ..	..
50000	Newfound. Min. Ass. [L.]	0 2 0	⅛ ..	..
5000	New Holtzappel Mining [L.]	1 0 0	1 ..	..
16000	Nouveau Monde (cop.) [S.E.]	1 0 0	⅛ ..	..
65000	Piedmontese (copper) [L.]	1 0 0	— ..	..
160000	Port Phillip (gold)	1 0 0	⅛ ..	.. 10s. 12s.
50000	Quartz Reduction [L.]	1 0 0	⅜ ..	..
6000	Rossie and Canada (lead)	10 10 0	— ..	..
47795	Strathalbyn (copper) [L.]	1 0 0	— ..	..
7820	Ditto, Preference, 10 per cent.	1 0 0	— ..	..
2000	Turk's Head (copper) [L.]	0 10 0	5 ..	..
1000	Western African Malachite	85 0 0	100 ..	..
35425	Wheal Jamaica (copper)	0 17 0	18s. ..	..
75000	Wildberg (silver-lead, copper)	2 0 0	⅛ ..	..
100000	Worthing (copper) [L.]	0 14 0	¼ ..	.. 5s. 6d. 6s.

PROGRESSIVE MINES.

Shares.		Paid.	Last Price.	Present.
6000	Abbey Consols (id.) Cardigan	0 18 6	1 ..	..
10000	Angarrack (copper), Phillack	1 0 0	1⅛ ..	..
256	Antron Consols (cp.), St. Erth	9 7 3	8 ..	..
1000	Ashburton United (cop., tin)	4 0 0	4 ..	5 5⅛
10000	Ballymonoen (copper)	2 0 0	— ..	..
4000	Ballyvirgin (lead) [L.]	4 5 0	2¼ ..	..
10000	Bampfylde (copper), Devon	0 12 6	6½ ..	..
1000	Barf (lead), Keswick	1 5 0	2½ ..	..
1024	Basset Consols, Illogan	1 10 0	1 ..	..
6000	Basset Grass Untd (cp.), Kea	1 10 0	— ..	..
4000	Bedford Consols (copper)	1 0 0	¼ ..	4s. 5s.
506	Bell and Lamarth, Gwennap	16 15 0	5 ..	4½
2000	Berehaven (cop Ireland	1 0 0	1¼ ..	..
250	Berriow Consols (lead)	14 16 0	8 ..	..
5000	Boiling Well (cp.), Gwithian	3 10 0	1½ ..	..
20000	Bog (lead), Salop [L.]	1 10 0	— ..	..
6000	Bolenowe (copper)	1 17 6	1 ..	..
1258	Boscaswell (tin and copper)	—	5 ..	..
20000	Bream Iron Mining Co. [L.]	0 10 0	¼ ..	..
1120	Bridford Consols	8 8 0	⅞ ..	..
5000	Bristol & Forest of Dean [L.]	1 0 0	— ..	..
4000	Brook Wood, Buckfastleigh	0 12 6	1 ..	..
2000	Bromfoyd (£5 5s. paid) [L.]	4 0 0	6¼ ..	..
560	Pwll-y-Wheel (lead), Mold	7 12 0	12 ..	..
4096	Queen of Dart, Ashburton	0 10 0	⅜ ..	..
5000	Ramsley Hill (cp.) Sticklepath	1 5 0	6½ ..	..
2896	Raven Rock (cop.), Buckland	0 7 6	⅝ ..	⅛
600	Redhill Mining [L.]	10 0 0	— ..	..
12000	Redmoor (copper and tin)	0 3 0	⅛ ..	..
4096	Respryn (copper)	0 3 6	⅛ ..	6s. 7d.
5000	Elliton Castle Mining [L.]	1 11 0	1½ ..	..
10000	River Tamar Copper [L.]	0 5 0	⅛ ..	..
6000	Rosewall Hill & Ransom Utd.	2 0 0	2½ ..	⅛
4096	Rosewarne Consols (copper)	1 18 0	3 ..	..
1024	Rosewarne & Herland United	2 10 0	4 ..	..
5000	Round Hill (cop., id.), Salop	2 5 6	1¼ ..	..
15000	Ruardean Colliery [L.]	0 5 0	⅛ ..	..
6000	Severn Mines (lead) [L.]	1 6 6	⅛ ..	..
4000	Sithney Wheal Buller (tin)	4 7 0	5 ..	4
200	Shropshire Blackwood [L.]	5 0 0	4 ..	..
512	South Basset (cop.), Gwennap	2 0 8	4½ ..	4 4½
1300	South Bog (fd.), Shrop. [L.]	5 12 6	⅛ ..	..
6400	So. Buller & W. Penstruthal	0 10 0	⅛ ..	..
6000	So. Caru Brea (cop.) [S. E.]	2 9 0	3 ..	3⅛
6000	South Clifford Utd., Gwennap	0 10 0	1 ..	..
6144	S. Condurrow (tin, cp.) Camb.	0 12 0	1⅛ ..	..
3502	So. Crenver (cop), Wendron	6 3 2	1⅛ ..	..
6000	South Crowndale (copper)	—	⅜ ..	..
6000	South Cuddra (cop.), St. Aust.	0 16 0	1 ..	..
6000	S. Dolcoath & Carnarthen Con.	1 10 0	2 ..	..
256	South Garras, Kenwyn	26 0 0	80 ..	..
2000	South Gorland (cop.), Redruth	5 0 0	2½ ..	..
2000	South Herland and Relistian	1 0 0	2 ..	..
6000	South Lady Bertha (copper)	0 4 0	⅛ ..	¼ ¼
512	South Penhaldarva (lead)	3 0 0	5 ..	..
5537	So. Phœnix (cop.) Linkin.	4 10 0	3½ ..	..
1024	So. Providence (tin), Sithney	3 7 0	5 ..	..
4096	S. Wh. Betsy, near Tavy, Dev.	0 3 0	⅛ ..	..
1105	So. Wh. Crofty (cop.), Illogan	1 18 10	3¾ ..	..
1024	S. Wh. Ellen (cp.), St. Agnes	6 8 4	3 ..	..
400	So. Wh. Seton (cop.), Camb.	9 0 0	10 ..	..
6000	So. Wh. Wrey (lead), St. Ive	0 1 6	⅛ ..	..
4000	Snow Brook, Plynlim. [L.]	2 0 0	2 ..	..
5208	St. Austell Consols (tin, &c.)	3 6 0	1 ..	..
60	Staffordshire Iron Ore [L.]	100 0 0	— ..	..
1000	Stoney Way [L.]	1 0 0	1⅛ ..	..
920	Stray Park (cop. and tin)	12 5 3	2 ..	..
6000	Sunny Side (id., Iron), Durham	1 0 0	2 ..	..
1280	Swanpool (lead), Budock	12 18 7	3 ..	..
5000	Talicsin (silver-lead) [L.]	5 0 0	— ..	..
20000	Tassan Mining (lead) [L.]	1 0 0	— ..	..
2554	Tavy Con. (cop.), near Tavis.	5 14 6	⅜ ..	..
6400	Tees Side (id.), Cumberland	1 11 6	⅛ ..	..
1000	Tokenbury Consols, Liskeard	10 2 0	1 ..	..
6000	Tolvadden (cop.), Marazion	—	6⅛ ..	6⅛ 6⅜
4000	Tracton Silver-Lead [L.]	1 3 0	1 ..	..
1024	Trebarvah (cop.), Perranuth.	10 8 4	1½ ..	..
5000	Treburgett, Crowan [L.]	5 0 0	5 ..	..
6000	Tregardock (lead) St. Teath	0 4 0	10s. ..	..
2048	Trehane (sil.-id.), Menheniot	0 15 0	⅜ ..	..
5000	Treloweth (cop.), St. Erth	4 8 6	5 ..	..
6000	Trelucky (copper), Cuby	0 5 0	⅛ ..	..
2000	Treselivn (tin, cop.), Altarnun	1 2 6	— ..	..
5600	Trevenen and Tremenheere	3 15 0	1 ..	..
3000	Tremoor Consols, St. Austell	0 10 0	1 ..	..
8000	Tretoil & Messer Utd. (c.,tin)	1 0 0	1½ ..	..
6000	Trevone Consols, Padstow	0 2 0	⅜ ..	..
1024	Trevoole, Crowan, Cornwall	13 1 0	10 ..	..
6400	Trewane United (silver-lead)	1 5 0	1 ..	..
6400	Tyne Head (silver-lead) [L.]	0 5 0	⅛ ..	..
4000	Tyn-y-Worglodd (slate), Car.	5 15 0	7s. 6d..	..
6000	Virtuous Lady & Wh. Bedford	0 13 6	⅜ ..	..
5085	United Mines (cp., &c.), Tav.	1 0 0	⅛ ..	..
200	Waenlas (lead), Denbigh	7 10 0	25 ..	..
960	Wendron United (tin)	1 14 0	2½ ..	..
1024	W. Alfred (cop.), Philiack	34 17 4	22½ ..	25
2000	West Crinnis & Regent United	6 7 6	5½ ..	..
1080	West Cupid (tin), Redruth	2 5 0	2 ..	..
4005	West Dolcoath (copper) [L.]	1 0 0	1 ..	..
6000	West Grenville (cop.), Camb.	0 11 0	8s. 6d..	..
25000	West Par Con. (cp.) St. Blazey	1 6 0	½ ..	⅛ ⅜
854	West Porkellis (tin), Wendron	0 10 0	1 ..	..
1024	West Rosewarne United (cop.)	6 17 6	2 ..	..
256	West Sharp Tor (cop.) Illiaton	46 0 0	30 ..	25 30
6000	West Snail Beach (lead)	1 0 0	½ ..	..
1056	West Stray Park (cop.), Camb.	3 10 0	4½ ..	..
1024	W. Ting Tang (cop.), Gwennap	0 5 0	1 ..	..
5126	West Tolvadden (cop., tin)	0 4 0	1½ ..	..
1879	West Treveiyan, tin & copper	5 0 0	26s. ..	..
512	West Wheal Frances, Illogan	43 10 0	13 ..	..
10000	West Wheal Jane (tin, &c.)	2 10 6	⅜ ..	..
2560	W. Wh. Reeth (tin), Uny Lel.	1 0 0	1⅛ ..	..
500	W. Wh. Towan (tin), Redruth	40 0 0	— ..	..
4000	Wheal Addams (cop. & lead)	0 11 0	⅜ ..	⅜ ⅜
6000	Wheal Agar (copper), Illogan	1 16 0	2 ..	..
6000	Wh. Amery (l. & c.), Christow	0 5 0	⅜ ..	..
1024	Wheal Annie (cop.), Gwinear	2 2 8